

Issue 5 September 1995

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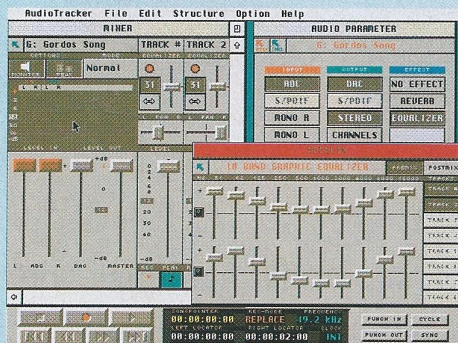
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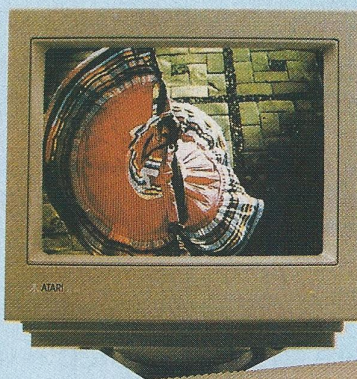
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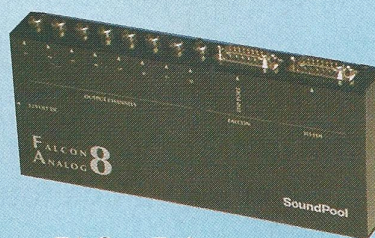
Best Hard Drive 1994



1Gb, 1.7Gb, 4.3Gb
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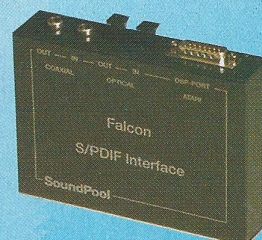


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ST User, February 1994

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NB: Excellent with Calamus SL. Compatible with Notator Logic, but not with Notator SL and not yet compatible with Cubase.

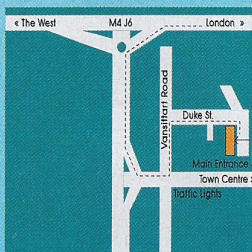
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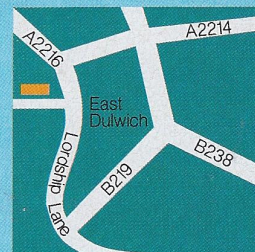


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ATARI WORLD LAUNCH OFFER
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Ease



ST FORMAT Awarded 97%

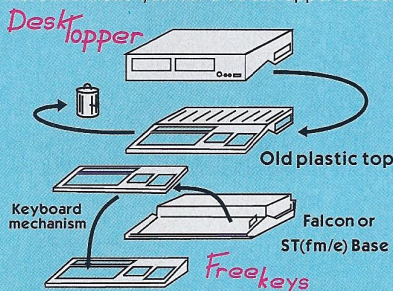
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Best Hard Drive 1994 - ST Review Christmas '94
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Gold Award of 93% - ST Format Feb. '94

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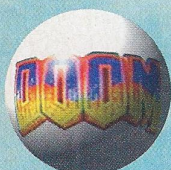
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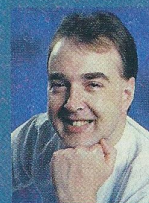
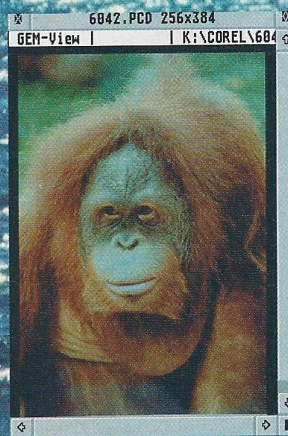
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A panacea for lost sounds

Don't miss the
October issue on
sale Sep 15th



Fit for the future

Following in the footsteps of Vic Lennard is no mean feat, and that has absolutely nothing to do with his size thirteen

shoes. He has proved himself to be a tremendous driving force in the Atari market over the past few years and his presence will certainly be missed. I am sure you will join me in thanking him for his effort in successfully launching Atari World.

Although it saddens me to see Vic leaving due to health reasons, I am very excited about the prospect of guiding the good ship Atari World into the future. You can rest assured that we will continue to bring you the same mixture of informed reviews, practical features and in-depth tutorials. My role has changed slightly, but the magazine is still being written by the team of ST fanatics you've come to know and... like quite a lot.

And they have been busy this month - you'll find no less than nine pages dedicated to making the most of Timeworks and its font system. The whole topic of CD-ROM is given similarly comprehensive treatment and hard disk users will no doubt enjoy the Diamond Back 2 review. If the lighter side of ST life is more your scene, check out SubStation; the first multi-player game to push the STe to its limits. Equally exciting for Falcon owners is the release of Exposé - a true-colour frame grabber that tips the scales at a shade under £300! Needless to say, all of this is backed up by the reviews and Jaguar coverage you've come to expect.

Thanks for supporting Atari World and making the magazine a success. You've proved beyond a shadow of a doubt that the Atari scene is alive and kicking; we intend to honour our side of the bargain by continuing to produce a quality magazine for the discerning ST, TT & Falcon user...

AW

Andrew Wright, Editor



SNIPPETS

• Floppyshop (01224 586208) has been appointed UK distributor for the commercial version of the Omen cross platform multi-tasking operating system and associated developers' kit. Omen is currently available for Atari computers with the PC, Mac and Amiga versions nearing completion. What makes Omen different from other multi-tasking operating systems is that programs written for Omen on the Atari will operate without modification on any computer running the Omen system. Omen costs £20.00 and the Omen Developers' Kit costs £12.00. Usable demo versions of both packages are available from most PD libraries.

• Dave Small, formerly of Gadgets by Small, has recently announced that he is working on a new release of Spectre GCR, the Mac emulator for the ST. The closure of Gadgets by Small means that another, as yet unnamed, company will be handling the distribution. The forthcoming release will be the first to emulate colour Macs and is to support System 7. Meanwhile in Germany, there is news of a shareware Mac emulator from the Amiga (Shapeshifter) being ported to the Atari. It also supports colour Macs and runs System 7.

• UK based Attention To Detail (01926 843444) have launched the first CD sound player for the Jaguar. The software, which has already been used in the development of CyberMorph, BattleMorph and Blue Lightning, is now available to Jaguar developers for a one-off licence fee. The cartridge version allows standard MIDI files to be played at 16 MHz using the Jaguar's hardware, supporting up to four tunes playing concurrently. The CD version also plays up to four tracks concurrently but it supports audio CD at 44 MHz. Simultaneous game sound effects are supported by both versions.

News

New Jag games

Atari recently held an open day to show off some forthcoming Jaguar games.

Thirteen cartridges and 8 CD titles were on display including some not previously announced. Amongst the highlights were Attack of the Mutant Penguins, Fight For Life, the Jaguar's answer to Virtua Fighter, and Zero 5 which has been ported from the Falcon.

Zero 5 is still in its early stages but shows just how fast and smooth the Jaguar can throw polygons about when properly programmed. Atari were describing it as a kind of 'virtua-galaxians' but there's more to it than that.

Fight For Life was looking good with texture mapped polygon based characters, furious action and fast moving camera angles. This game has been worked on by some of the



industry's topnames in fighting games and promises to help put the Jag back on the map as a contender in the super-console stakes.

White Men Can't Jump is a new basketball game with a difference. Apart from great 3D graphics it will come bundled with Atari's new Team-Tap add-on that allows up to four people to play simultaneously.

The long awaited Rayman

was also nearing completion and should be out in August.

Another long-awaited title, Highlander, was looking impressive but is to be up-rated to include texture mapping on the characters.

Finally, a RAM card has been announced for game saves on CD titles. With 128K of memory it should be sufficient for quite a few games and at predicted price of £20, it won't break the bank.

Atari are gambling on the new Jaguar price point of £149 being crucial to its success. With the opposition such as the Playstation and Saturn weighing in at £400 or so, the hope is that the Jaguar will pick up the mass-market sales. To that end, Atari have signed up a raft of well known high-street retailers to stock the machine in the Christmas run up.

CD mastered!

Atari CD Master (ACM) is an exciting new product from Homa Systems in Canada. The package features Audio CD Master (an audio CD player) as well as a multi-media authoring system which acts as a front end to a number of DOS and Windows CD ROMs. ACM currently allows you to access Time Almanac Of The 1990s, Time Almanac 1994 Reference Edition, UFO I, UFO II, Space Missions, 1995 Auto Almanac, Total Body and MPC Wizard V2, with support for other titles (including Compton's Multimedia 95) being added as an ongoing process.

The software has been designed in such a way that other CDs from the publishers of currently supported titles can generally be persuaded to run with minimal changes to the appropriate driver. The software looks for common indexing features on the CD and tries to build a driver based around these. This means that the system has the potential to

support many more titles than those listed.

ACM runs in monochrome on any ST/Ste and supports 16 colour and 256 colour modes on the TT and Falcon. Graphic cards are also supported with resolutions of up to 1024 by 768 dependent on hardware and memory. ACM is fully compatible with multi-tasking operating systems, supporting up to 4 open windows at any time (up to 10 on Total Body). You can view pictures, run animation clips, read text and play sound samples, with the ability to save or print data. ACM's powerful search engine also allows you search the entire CD for specified keywords.

Audio CD Master v4.0 is also bundled with the package. At the moment it acts as an alternative audio CD player for use with MetaDOS or ExtendoS, but a full CD ROM data driver is under development and this will eventually

be integrated into the system to offer a complete solution for both data and audio CD ROM access on Atari machines. As well as all the usual functions of an audio CD player, Audio CD Master allows you to select a sequence of up to 16 tracks to play and save your preferred sequence for later use. Probably its most useful feature is its ability to display and select tracks by name rather than number. Audio CD Master runs as a program or accessory and supports multi-tasking. Like ACM, it requires a minimum resolution of 640 by 400.

ACM costs US\$39.95 plus postage and packaging and is available now. A UK distributor is expected to be announced in the near future. In the meantime, you can order directly from Homa Systems House, PO Box 52127, Ottawa, K1N 5S0, Canada, on telephone number: 001 613 722 0901.

Games galore!



TALES FROM THE INTERNET

Graeme Rutt wanders the Yahoo in search of Atari gold.

Whenever you're on the 'Net and you want to find a site on a specific subject you should try the Yahoo database on <http://www.yahoo.com/>. This is a glorious directory of tens of thousands of different sites that can either be browsed or searched at will. It works well over CIX Lynx, which includes support for search forms.

While on the Yahoo database I thought it might be interesting to check out how many Atari sites had registered with it. I was pleasantly surprised to find out that there were quite a few – which is maybe strange for a computer that doesn't (yet) have a proper graphical browser.

The sites listed range from commercial vendors, for instance Toad Computers (<http://www.charm.net/~toad>) and Cyrel (<http://www.interlog.com/~cyrel>) to lists of other Atari pages kept by private individuals (<http://www.mcc.ac.uk/~dlms/atari.html>). There were plenty of links to Jaguar sites, Atari FAQ's (frequently asked questions) and all manner of other Atari related gear.

This all leads me on to the question of just who is using the sites? Are there thousands of Atari users huddled over monitors watching Lynx throw up its not so glorious text display? Or maybe these sites cater to the Atari user who also has a PC or Mac? I suppose the answer lies somewhere between the two.

I promised a few issues ago to bring you news of a real, working, graphical browser for the Atari. It's now available via FTP to 'micros.hensa.ac.uk' and it's in the 'micros/atari/mint/a073' directory. It's an all in one package that claims easy set-up – even though it does some very weird things to your Atari – like turning it into a UNIX computer! If you're desperate to browse (and why not) then go get it.



Despite the Atari market's move towards application software over the past couple of years, there's still a healthy craving for new ST games which is about to be addressed by Top Byte Software (01622 763056). Top Byte, the commercial arm of Power PD, has just announced the forthcoming release of no less than six ST games between now and the end of the year, with several other projects in the pipeline.

Space Ace STario is the followup to the recently released STario Land. Like its predecessor, Space Ace STario is a platform game and, as the title suggests, it is set in Outer Space. As with all games of this genre, the plot is simple. You must rescue Princess STacey from the evil Spaces Hordes by battling through various levels of UFOs and strange aliens. Space Ace STario is due out next month. It will run on any ST and cost £18.99.

Also expected around the same time is 999 Software's Alien Thing, originally destined to be an independent release but now under the wing of Top Byte. Alien Thing will cost £19.99 and although it will run on any 1Mb ST, it will also be STe and Falcon enhanced.

Cyber Knight is a 3D isometric adventure where you have to battle through woods, villages, castles, dungeons and ultimately heaven and hell, in pursuit of your girlfriend! Along your way, you will encounter many different characters with whom you can interact. There are different puzzles which have to be solved in order to complete each level and plenty of monsters to fight, traps to avoid and objects to collect and use. Cyber Knight runs on any ST with 1 Mb and will cost £19.95. Expect to see it around November.

If you are a fan of 'God' games, then Outrider may well be this year's biggest release as far as you

are concerned. It is described as a sci-fi strategy game where you battle it out against your opponent (human or computer controlled) for total supremacy. It boasts advanced artificial intelligence, ten ready made worlds and the ability to create your own. The aim of the game is to take charge of an army and build up an arsenal of weaponry in order to annihilate your opponent. Outrider will run on any ST with 1Mb and is enhanced for the STe and Falcon. It is due for release next month, with a price to be announced.

Unique Developments' Obsession may be a hard act to follow, but that's exactly what Top Byte are trying to do with Fruit Machine Fun. Fruit machine simulators may be old hat, but this one is certainly out of the ordinary, to say the least.

It features four different theme-based fruit machines, namely Party Land, Nightmare, Wild West and Space Spin. Each machine is three or four screens high, utilising the STe's blitter and hardware scrolling to full effect. Other features include 25 kHz stereo in-game music and sound effects and border removal. Fruit Machine Fun runs on any STe with 1 Mb and costs £24.95. Expect to see it around the end of October.

Towards the end of the year, Scapegoat is set to burst forth onto your screens. A protected planet has been blown up by a missile and you have been blamed for the atrocity. You must fight your way through this manic shoot 'em up in an attempt to recover the missile's black box and clear your name. Scapegoat will run on any STe with 1Mb of memory and will cost £19.99. An STFM version may also be developed.

For more details on any of the above, you can contact Top Byte Software, 3 Salisbury Road, Maidstone, Kent, ME14 2TY.

JAGUAR UPDATE

Minter fans rejoice – Defender 2000 is now scheduled for release on cartridge! According to recent reports on the 'Net, Atari has had a change of heart and wants the long-awaited follow up to Tempest 2000 to be available to all Jaguar owners, and that's only possible by using the cartridge format. The game will lack the promised FMV sequences and CD audio, but the gameplay will be identical and there weren't too many complaints about Tempest's cartridge based soundtrack. Do you detect the distinct aroma of a prospective pack-in?

And if you need more proof of Atari's commitment to classic game concepts, look no further than Dactyl Joust. The game is still under development, but initial screen shots look very promising, with 3D graphics and traditional Joust gameplay clearly evident. Also hot off the rumour mill is the news that François Bertrand (of Fight For Life fame) has expressed an interest in producing Pong 2000 for Atari; and yes, he really does seem to be serious!

Moving back to the "modern" stuff, White Men Can't Jump seems to be the best of the "almost finished" bunch. It features some beautifully shaded graphics and is also the very first game to take advantage of the Jaguar four player adapter (which should be packaged with the cartridge). Following closely behind in the desirability stakes are F1-Racer and BattleSphere. The former looks set to steal Checkered Flag's undeserved "best Jaguar polygon racer" crown, while BattleSphere, Atari's answer to Tie Fighter and Wing Commander, is looking better by the day.



BattleSphere is just one of the many games that will be appearing within the next few weeks.

F1-Racer should put Checkered Flag (pictured above) well and truly in the shade.



Ping 2000 for the Falcon may soon be joined by an Atari-approved Jaguar counterpart.

The CyberSTrider Files

Denesh Bhabuta finds that some programmers have been very busy lately.

Lots of files this month, so let's dive straight in. Stoop, the Falcon boot manager has had its memory handling routines rewritten so you can use large configurations. Version 1.05 has also got rid of most bugs.

The alternative desktop, Thing, has been updated yet again and with many new features appearing with every release, version 1.0 is bound to be a stunner, especially if the planned communications layer (sockets) is built in. This will allow you to use ftp and WWW programs without the need to install Mint and Mintnet!

Two-in-One 1.40a brings with it a few new features and some interface changes such as resizable windows. It now integrates properly with Kobold for copy, move and delete operations. Another archive manager,

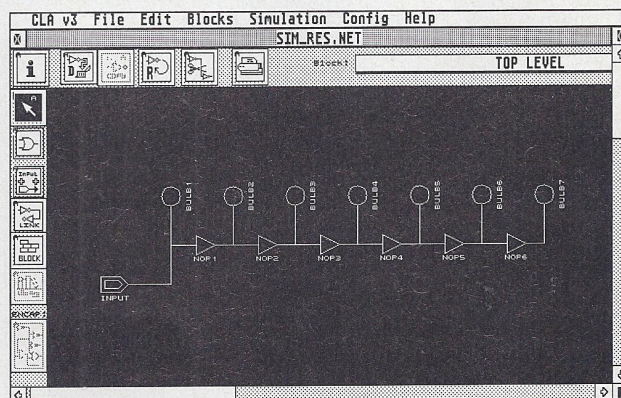
Pacshell, is now up to version 2.62 with various new drag and drop actions and support for a program called Diffy, a file compare and patch utility.

Modules for the excellent screen saver, Twilight, have started appearing and an English demo version has been released by JCA Europe.

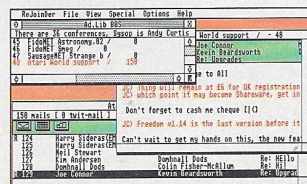
Rejoinder is a freeware QWK off-line reader for the ST. In the latest beta version, the author is working on making it Falcon and MagiC compatible, as well as providing Bluewave and Fidonet support.

Finally, I've just received a beta version of CLA 3. This is an interesting CAD program for electronic circuits, and includes many new features, including auto-routing and encapsulation.

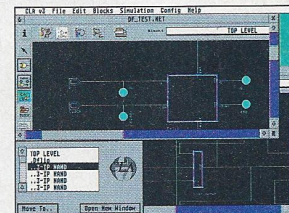
Denesh Bhabuta
(dbhabuta@cix.compulink.co.uk)



Create professional electronic circuit designs with CLA.



Use Rejoinder to save on your phone bills.



On the falcon CLA looks stunning.

Next month...

SERIAL KILLER...

ATARI Pro

Atari Pro takes an in-depth look at your communications port:

- ◆ Which Modem for your Atari?
- ◆ How fast is your serial port? ST, Mega STe, TT and Falcon are all different! We explain.
- ◆ How can you accelerate a humble ST serial port? We look at serial port accelerators including a low cost step by step DIY upgrade.

- ◆ Fax software - what's available and how well, if at all, does it work? **PLUS...**

ON SALE
15TH SEPT 95

ATARI World

- ◆ Mortal Combat did it for Sega and Nintendo, can Ultimate Arena change the shape of Atari 'Beat-em-up's'?
- ◆ DA's Layout 2, the way forward for professional DTP on the Atari? We preview the new version!

...AND MUCH MUCH MORE!

SUBSTATION

Life
is a gift.



Death
is your salvation.

From the makers of Obsession
Showing now at a computer near you

© Unique Development Sweden 1995

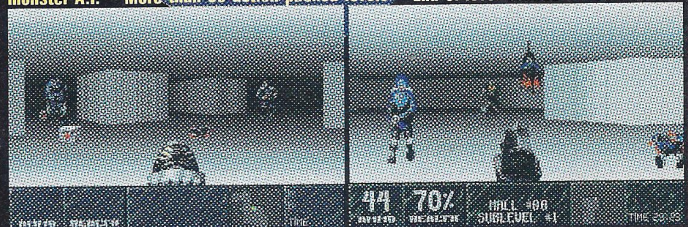
SUBSTATION: In 1996, Mitushi Industries Corp. reveals the greatest innovation in search of alternative energy sources.

By cooling the lava streams inside the mantle they create electric power through large underwater turbines.

Two years later, Mitushi's "IEE" (Inside Earth Energy) base SubStation, at 2500 metres below sea level, is fully operational and provides Japan's two largest cities with all their power needs.

June 6th, 1999, 11:15 am. Contact with SubStation is lost. In panic, Mitushi's board of directors pay the U.S government an unknown amount of money to lease an "M.E.M"-squad to explore the secrets of the ceased contact with SubStation. Secrets that should remain hidden, deep down at the bottom of the sea...

SubStation features: True 3D world More than 2000 different locations A vast number of horrifying enemies Real time Gouraud shaded walls Advanced DD-Audio sound 6 different weapon types Multiplayer mode Secret rooms & booby traps Real-time light-sourced sprites 25 kHz sound More than 30 colours "Trial and error" monster A.I. More than 36 action-packed levels End-of-level bosses 100% horror!



Reader Disk

Credit card
order hotline:
01487 773543

A cover disk increases the price of a mag yet many readers never even look at the software! There has to be a better solution – the Reader Disk...

The optional reader disk directly supports the software covered in the magazine and creates a link between the reader and the software author. Atari World supports and encourages authors – in return you can do your bit by supporting them. The Atari World team is in constant contact with the best

Atari programmers around – we keep your finger on the pulse and obtain the very latest versions, often exclusive to Atari World!

A single reader Disk costs £2.50 inclusive of post and packing – around the same price as a typical PD disk. Some issues offer two or more reader disks with each additional disk costing £1. For example, an issue with two disks would cost £3.50 inclusive of post and packing.

So the choice is yours but don't forget subscribers get all additional disks absolutely free! Check out the special subscriber deals on pages 40 and 41.

What's on the disk?

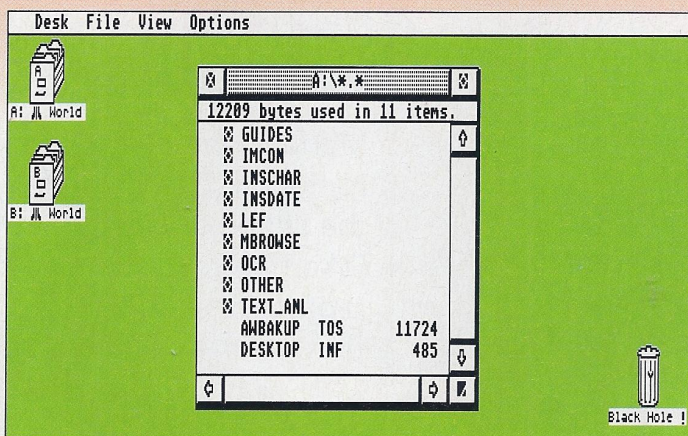
As usual everything on this month's reader disk is covered inside the magazine. To make it easy to back up your reader disks a copy of AWBAKUP.TOS, specially programmed by Ofir Gal, is included each month. Simply run AWBAKUP.TOS and follow the on-screen instructions; the program even formats the disk for you. We recommend you always store your original disks in a safe place and don't use AWBAKUP.TOS for any other purpose.

This month's reader Disk contains:

ImCon v1.1

Freeware • Christoph Pfisterer

ImCon is a GEM utility to view, zoom, dither and convert between most



popular formats including: Doodle, Degas, Neochrome, STAD, Tiny, AIM, Art Director, Spectrum 512, IMG, IFF, PCX, GIF and TIFF.

InsChar and InsDate

PD • Matthew Carey

These two small desktop accessories enter any ASCII character (InsChar) or the current date (InsDate) into most text editors and word processors at the current cursor position.

Let 'em Fly! v1.3

Freeware • Darryl Piper

Drop this in your Auto folder and options in dialog boxes can be selected using keyboard shortcuts. The dialog boxes, normally displayed centrally on screen, can 'fly' around the screen by dragging the 'Donkey ear' icon.

MasterBrowse v4.9

Special Edition • Shareware • Michel Forget

A flexible text file viewer with scrollable window, clipboard, search and built-in printer support. A definite 'power up' compared to the built-in Show/Print/Cancel dialog.

OCR v1.4a

Exclusive • Freeware • Alexander Claus

Optical Character Recognition (OCR) converts scanned images into editable ASCII text. This version includes basic image and text editing features. Every scanner owner should try OCR!

Text Analyzer

PD • Dan Ackerman

If you've written a masterpiece and fancy a second opinion you could do worse than letting Text Analyzer pass judgement (you could try Atari World's editor but I wouldn't give much for your chances...). Also included is a useful word count feature.

Everything on this month's reader disks is covered inside the magazine. The folder extension points you to the relevant section of the magazine. AW for the main mag, ST for ST Source, PRO for Atari Pro and PA for Public Arena. For example a folder called ADDRESS.PA means Address is covered in Public Arena. To make it easy to back up your reader disks a copy of AWBAKUP.TOS is included. Simply run AWBAKUP.TOS and follow the on-screen instructions; the program even formats the disk for you. We recommend that you always store your original disks in a safe place and don't use AWBAKUP.TOS for any other purpose.

Reader disk problems

In the unlikely event that a reader disk won't load or gives you any other problems, disconnect all peripherals, switch off your computer for at least 20 seconds and try again.

If this doesn't solve the problem, return the disk to the Atari World Disk Sales address clearly labelled Atari World faulty disk and enclose a self addressed envelope. Your disk will be tested and replaced or returned as quickly as possible. Should you require technical help, call the Atari World Disk helpline on Wednesday evening between 19.00 and 21.30 on 01206 852602 or leave a message on the answer phone outside these hours.

**SEE PAGES 74-75
FOR ORDERING
INFORMATION AND
BACK ISSUES**



Floppyshop

**PO BOX 273,
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Partners: Steve Delaney & Irene Lamb



Quality and Service

At Floppyshop we only stock the very best software. All our ST disks are double sided and are crammed full. Our Falcon disks are mostly HD and are full where possible. In addition, our catalogue disks are the most detailed in the UK and cost just £1.00. **Please state ST or Falcon.** Same day despatch on orders. Credit card orders are welcome (minimum value £2.00). Unless otherwise stated, all disks cost 2.00 each and run on standard machine with 512k of memory (1 Mb if it's a Falcon) upwards. **COLOUR OR MONO** Disk numbers ending 'C' i.e. GAM.10C are for COLOUR MONITORS OR TV'S ONLY. Disk numbers ending 'M' eg. ART.63M are for MONO MONITORS ONLY. **RGB or VGA** Indicates the monitor type required for a specific Falcon program.

ART & GRAPHICS

S-ART.3872 & S-ART.3873 KANDINSKY - The natural 'successor' to Easy Draw. Impressive vector graphics editing package which supports both mono and colour objects. SpeedoGDOS and Multi-TOS compatible. ART.4673 SPEED OF LIGHT V3.8 - Probably the fastest picture viewer for GIF, JPEG, Degas, Prism Paint and (X)IMG files that are ever likely to come across. Now with built-in slideshow option.

ART.5110 IMCON - Converts between more than a dozen image types. POV-MOV - A POV shell which can render numerous scenes one after the other by using a script file. It can also generate animations. PIXKROME - Basic image processing of True Colour images on a standard ST!

ART.5184 SCAN-IT - Shareware scanning software with some image processing capabilities. Scanner drivers available when you register. MUNCH - A truly incredible monochrome art package crammed with features. Includes SpeedoGDOS support. Needs 1 Mb, MONO ONLY.

CLIP ART FOR DTP

CLIP.114, CLIP.115, CLIP.116, CLIP.3494 A collection of over 700 high quality images in GEM vector format. Resize as big as you want with no loss of quality. Only £2.00 per disk!

CLIP.5044 WORDS & IMAGES SAMPLER DISK - A collection of vectorised images in Calamus CVG format. Taken from a much larger collection.

CLIP.5134, CLIP.5135, CLIP.5136 & CLIP.5137 - A collection of over 100 assorted images in PCX format on four disks. £2.00 per disk.

We also have hundreds of disks of quality IMG clip art, all from 2 per disk or less! Order our catalogue at £1.00 for full details.

DISK MAGAZINES

DMG.5160C STOSSER #23 - The final issue of this popular disk mag for STOS users. Packed with articles and source code. All back issues still available. DMG.5178C WARP #2 - A disk mag dedicated to Star Trek and Star Trek - The Next Generation. The main menu is the control room of the Enterprise and you select articles to read by flying to various planets! Issue 1 available on DMG.4977C.

DMG.5229 ST NEWS 10.1 - Now in its tenth year, this popular disk mag is jam packed with everything Atari related and lots of non-computing stuff too. Back issues available.

DMG.5269C THIRD DIMENSION #15 - An impressive disk mag dedicated to users of Domark's 3D Construction Kit v1 & v2. Contains articles and code. All back issues still available.

DMG.5274 POWER #26 - A popular all rounder on the disk mag scene. Features reviews, articles, letters, humour etc. This issue is dedicated to Star Trek. Back issues from #16 still available.

EDUCATIONAL

EDU.4201C BENJAMIN'S ABC - A simple alphabet 'book' where the picture is described vocally as often as is required. Highly recommended.

EDU.4891C CLASSROOM MATHS 1 & 2 - Eight fun games designed to teach addition, subtraction, multiplication and division. It's so much fun that your child won't realise he/she's learning!

EDU.4940C FUN TIME 1 & 2 - Tutor on shapes, keyboard, mouse, clock, pictures, money, seasons and more. Uses a similar idea to the old Fun School series. Ages 3-6 years. Very highly recommended.

Floppy WARE - As Priced.

These disks are of commercial quality despite their low price and offer excellent value for money.

FWG.20C THE SENTENCE PROGRAM by Ian Holden - A fun game for youngsters learning to put sentences together. One of our most popular disks! £3.00

FWG.36C THE WORLD AT WAR by The Seaton Shareware Co-op - A game of economic and military strategy on a global scale. £3.00

FWG.37C WAR OVER THE REICH by John Fowlston - A simulation of the RAF's night-time bombing operations against Germany during 1943/44. £2.50

FWG.43C LEXICON WORD HANDLER by Peter Legge - A 65000 word list with a comprehensive management utility. Use it to produce or solve word searches, anagrams and word puzzles and much more. Our best selling title! £3.00

FWG.45C CRAZY LETTERS by Dunces Cap Software - An original and addictive word game, arguably DCS's best release to date. Great fun for ages 8 to 80. £3.00

FWP.49C THE CURSE OF BOLDA by Ledsaof - The ultimate multi-level platforms and ladders game spread over two disks. As well as collecting objects and avoiding 'nasties' you have to puzzle out the workings of buttons and switches and avoid traps. Better than many commercial releases Needs 1 Mb. £6.00

FWS.51C CLAN CONQUEST by Slipfinger & Amok - A strategic wargame where you must defeat the other four clan chieftains and unite Scotland. Build Keeps and Castles, recruit troops, raid enemy territory and more! £2.50

FWG.52C KEVS WORLD by Ledsaof - The full version of the predecessor to Curse of Bolda. Platforms and ladders action with arcade machines to play, lifts to use, keys to collect and locks to open! A classic, needs 1 Mb. £3.00

FWP.19C SPRITE WORKS 2 by Terry King - A powerful add-on package for GFA Basic3.x which adds over 100 dedicated machine code commands to make GFA even more powerful than STOS (even with all its extensions)! Well documented, it includes two full games, two semi-complete games, an art package and lots of example code. Two disk set, £7.00.

FWP.55C BLUDGEON 2 by The Seaton Shareware Co-op - A followup to their highly Shareware game of the same name. Bludgeon is a package for designing and playing Fantasy Wargames. This package has everything you need to create your own games, as well as eight ready made games on disk. Two disk set, £6.00

FONTS

FNT.3183 & FNT.3184 45 fonts for use with PageStream. £2.00 per disk.

FNT.3185, FNT.3186, FNT.3187, FNT.3188, FNT.3331, FNT.3332 - 102 PostScript Type 1 fonts for use with PageStream, SpeedoGDOS 5 etc. £2.00 per disk.

FNT.4273, FNT.4274, FNT.4275, FNT.4276 - 50 fonts for use with That's Write and laser printers.

FNT.4277, FNT.4278, FNT.4279 - 52 fonts for use with That's Write and 24-pin (or bubblejet) printers. £2.00 per disk.

FNT.5186, FNT.5187, FNT.5188 & FNT.5189 - 69 True Type fonts for use with SpeedoGDOS 5 or NVDI 3. £2.00 per disk

We have over fifty more disks full of Signum, Calamus, Type 1, True Type and Degas fonts. Check out full catalogue for a listings.

GAMES

GAM.177C HERO II - A top quality Shareware game which loosely resembles the old arcade game Gauntlet. Needs 1 Mb.

GAM.3000C INFILTRATION - Set in the future, you work for a trading company as a mercenary. The object of the game is to lay mines in an alien spacecraft, then escape. From the author of the forthcoming release, Alien Thing.

GAM.3153C VIOLENCE - Probably the best shoot 'em up ever on the ST! Fast action arcade style action with lots of extras.

GAM.3194 FRUIT PURSUIT - A cross between a fruit machine and a trivia quiz! JIGGERS - A multi-level brain teaser from the authors of Fruit Pursuit. GAM.3270C OZONE - Combined platform and puzzle game where the object is to get to the top of a tower within a specified time limit.

GAM.3277C B17 - Drop bombs onto buildings to clear a landing strip for your aircraft. F16 - An aircraft combat simulation. Includes different missions for varying complexities. F16 needs 1 Meg.

GAM.3278C HUNT FOR GREY NOVEMBER - Strategic warfare game. A sub is stolen by terrorists and your mission is to track it down and destroy it. Needs 1 Meg.

GAM.3308C JETPAC - An ST conversion of the legendary ZX Spectrum game where you fly around the screen dodging nasties attempting to build your rocket. HEADLONG - The ultimate fast action vertical scroller. A tribute to Avina Blue.

GAM.3338C DUNGEON LORD - Dungeon Master clone set in the future. You are sent back in time to 'repair' history and save the universe! Needs 1 Mb.

GAM.4951C SKYDUEL - Single or multi-player air combat game with ballistic missiles, dogfights and ground attacks. TANX - Tank warfare with various tokens to collect on your travels. BUGS - Frantic shoot 'em up where you have to clear all the creepy crawlies from the screen.

GAM.5122C COUNTER ATAK - A Tetris/Columns clone where you make rows by ensuring that blocks of the same colour DO NOT touch! Incredibly addictive. AMAZE - A 3D maze game which isn't as easy as it looks!

GAM.5123C THE ULTIMATE ARENA - An impressive karate game with every move clearly digitised so that it looks as if you are taking part in a film! STE ONLY.

S-GAM.5218 & S-GAM.5219 NISHIRAN - A massive role playing game, similar in concept to Dungeon Master but set in Outer Space. Atmospheric introduction and intriguing gameplay. Needs 1 Mb. Two disk set, £3.50 for set.

GAM.5220 ASTEROIDIA by 'Arcade Dave' Munsie - The ultimate Asteroids clone with stereo soundtrack, texture mapped rocks, superb background graphics and more. Needs 1 Mb.

UTILITIES

We have thousands of utility programs spread over several hundred disks.

A full description of every program is given in our catalogue.

UTL.3025 ZX SPECTRUM EMULATOR V2.07 - An all time favourite. Runs practically all Spectrum programs on the ST, TT and Falcon. Now includes joystick, microdrive and printer emulation. Needs 1 Mb.

UTL.3720 TOP NOTCH SOFTWARE UTILITIES COLLECTION - The Misty and Missing Link extensions for STOS Basic as well as several other programs which reconfigure your memory, play music files and much more...

UTL.4142 STOS GRAPHIC ADVENTURE CREATOR V2 - Allows STOS users to create impressive graphic adventures like Silly Software's Mobsters City.

UTL.4143 AWARD MAKER PLUS - Design your own certificates! Over 250 designs on disk which can be adapted to suit.

UTL.4657 XLATOR V2.04 - An excellent foreign language translation program with a 27,000 word German to English dictionary. Also includes a small French to English dictionary. Full registered version. Needs 1 Meg

UTL.5102 THING V0.54 - One of the most fully featured replacement Desktops around. Has all the best features of TOS 2+ and a few extras from System 7, Windows 95 and NeoDesk 4. Needs TOS 1.4 or better.

S-UTL.5222 & S-UTL.5223 ET4000 DIV GRAPHIC CARD PROJECT - A Shareware project which contains all the PCB layouts, explanatory diagrams, software and does needed to make your own adaptor allowing you to connect an ET4000 VGA adaptor to a Mega ST. There are also instructions for adapting the design for an ordinary ST. Do not undertake unless you are proficient to do so. Most of the docs are in German. Requires a hard drive. Two disk set, £3.50 for set.

UTL.5227 DRUG GLOSSARY - A database full of useful information on over 2200 commonly prescribed drugs. AL'S VIRTUAL FILE MANAGER - A program launcher which lets you have an unlimited number of entries in the menu, 30 character file names, move to any directory with a double-click and much more...

UTL.5228 ST2NC - Software and docs detailing how to connect your ST to an Amstrad NC-100 notebook computer for the purposes of file transfer. MANUALIZER - Prints out ASCII text in landscape or portrait mode. A4 or A5 size and using three different fonts. Needs GDOS.

FALCON 030 SECTION

We were the first to support the Falcon and now have almost 600 HD disks in our library. The Falcon catalogue costs just £1. Falcon disks cost £2.00 each unless otherwise stated. Please note that the disks in this section will NOT run on an ST or STE.

DEMOS

S-F5239, S-F5240, S-E5241 & S-F5242 LOST BLUBB by Independent - Asuperb multi-media presentation which combines a superb original soundtrack with computer graphics, real film footage and video overlaid onto computer generated backgrounds. Winner of the Fried Bits III competition.

The best demo ever made! RGB ONLY, Needs 4 Mb and a hard drive. 4 disk set, £7.

F5250 MUSAXX COMPILATION 1 by The Chaos Engine - A collection of fourteen originally composed stereo soundtracks ranging from easy listening to disco and acid house! All selected from a great main menu. Needs 4 Mb.

F5252 FRIED BITS III THING by Avena & Digital Chaos - Features numerous plasma effects, rotation zoom, 3D virtual world fly past, texture mapping, animated face distortion and lots more. Won 2nd prize in the Fried Bits III competition. RGB ONLY, Needs 4 Mb and a hard drive.

DISK MAGAZINES

S-F5234 & S-F5235 DBA MAG #12 - A joint effort between the DBA, ST News and Maggie teams which has resulted in the world's biggest disk magazine! There's 170 articles, 4 original 50khd MODs and several winning entries from the Fried Bits III competition. Most articles are Falcon based but there's a lot of non-computing material. Needs hard drive. 2 disk set, £3.50.

FONTS

E3980, E3981, E4723 & E4726 CALAMUS FONTS - A collection of 229 Calamus fonts spread over four disks. £2.00 per disk.

E3974, E3975 & E3976 POSTSCRIPT TYPE 1 FONTS - A collection of 103 fonts for use with PageStream or SpeedoGDOS 5, spread over three disks. £2.00 per disk.

F5208, F5209, F5210 TRUE TYPE FONTS - A collection of 95 fonts for use with SpeedoGDOS v5 or NVDI 3, spread over three disks. £2.00 per disk.

We have hundreds more fonts in Calamus, Signum and Type 1 format on HD disks. Full details on the catalogue disk.

GAMES

F4339 LASERS AND MEN V2.0 - Fast action Wolfenstein 3D clone on your Falcon. What more need we say! Highly recommended. Needs 4 Meg.

F5157 TOWERS II - The sequel to Towers on F4352. An atmospheric Dungeons and Dragons type game with objects to collect and use, guards to fight, doors to unlock and spells to perform. Graphics and sound effects are astounding and gameplay is gripping. Probably the best game you will ever play! Needs 4 Meg and a hard drive.

F5171 ZODIAX - A fast action Defender type game brought right up to date. Features powerups, tokens, shields, extra lives and more... The smooth scrolling, massive sprites and atmospheric sound effects make this a real winner for all shoot 'em up fans! Needs 4 Mb. Two more great games on disk.

F5172 WIN COLTRIS - Play Tetris or Columns in a GEM window. SUPER BOMBERMAN - A game for 1 to 6 players. Fast action cartoon fun as you detonate bombs to blast through walls and eliminate the opposition.

BOMBSQUAD - Similar to SBM but with killer robots and mad monks chasing you!

F5217 NISHIRAN - A massive role playing game, similar in concept to Dungeon Master but set in Outer Space. Atmospheric introduction and intriguing gameplay.

F5221 ASTEROIDIA by 'Arcade Dave' Munsie - The ultimate Asteroids clone with stereo soundtrack, texture mapped rocks, superb background graphics and more. Falcon enhanced version. Needs 4 Meg.

MUSIC

F4366 OCTALYSER V0.96 - An eight track soundtrack clone. Supports all the common 4 track MOD formats as well as some 6 track and 8 track formats from the Amiga. Can replay at up to 50khd in 16-bit stereo. DIGITAL TRACKER - A cut down version of an impressive commercial offering.

F5230 MOD PLAYERS & MORE - A collection of three superb feature packed MOD players, a MOD file database, a smart WAV file player and SONGZ, a multi-media database with D2D recording support.

PROGRAMMING

F4218 NEW TREND DSP SOURCES - A collection of over 200 source code examples in DSP56001 assembly language.

F5026 C56 - A modified version of the Micro C compiler which generates DSP56001 code. OOPLIB - An object oriented programming library for use with Hisoft Basic. LHARC SRC - Assembler and C source for LZH compression.

F5152 SOZOBON-X - An eXtended, bug fixed and improved version of the Alycon C compiler, Sozobon C v2. Supports profiling, pre-compiling and has built-in source level debugger and optimiser. Includes improved versions of DLIBS & GEMFAST and a graphic based front end. Extensive docs and on-line ST-Guide help.

UTILITIES

F5167 AVENA SCREEN ADJUSTER, BOOTSIE, CD PLAYER, FPU PATCH, KALEIDO, FREEDOM V1.13E, GDOS CHECK, HD PATCH, HOLD IT, MAGICF30 (patches MagiC 2 to run on the Falcon), MAUS WINDOW, PROBE HOUSE UNIT CONVERTER, SLOWBLIT, SUNFIX, WORLD CLOCK.

F5169 THING, BACKUP DESTRUCTION UTILITY, CHARMAP, MAGIC MODULAR APPLICATIONS GEM INTERFACE, ICONIFY SERVER.

F5231 AIRBAG, EPRO_210, ARKUS, BATFAX, NOVA BOMBER, CD BROWSER, DESKLOCK, EASY PGP SHELL, FORMINT, GENEVA PATCH, GEN MOUSE, GAMES PATCHES, ULTIMEM, VOX (voice recognition software!).

PAYMENT DETAILS:- All prices include postage in the UK. Overseas orders welcome. Please add £1 per order for Europe and 10% of order value (£2 minimum) Rest of World. Overseas customers please note - We can only accept payment by credit card or in UK currency (cheque drawn on a British bank is recommended). Cheques should be made out to FLOPPYSHOP.



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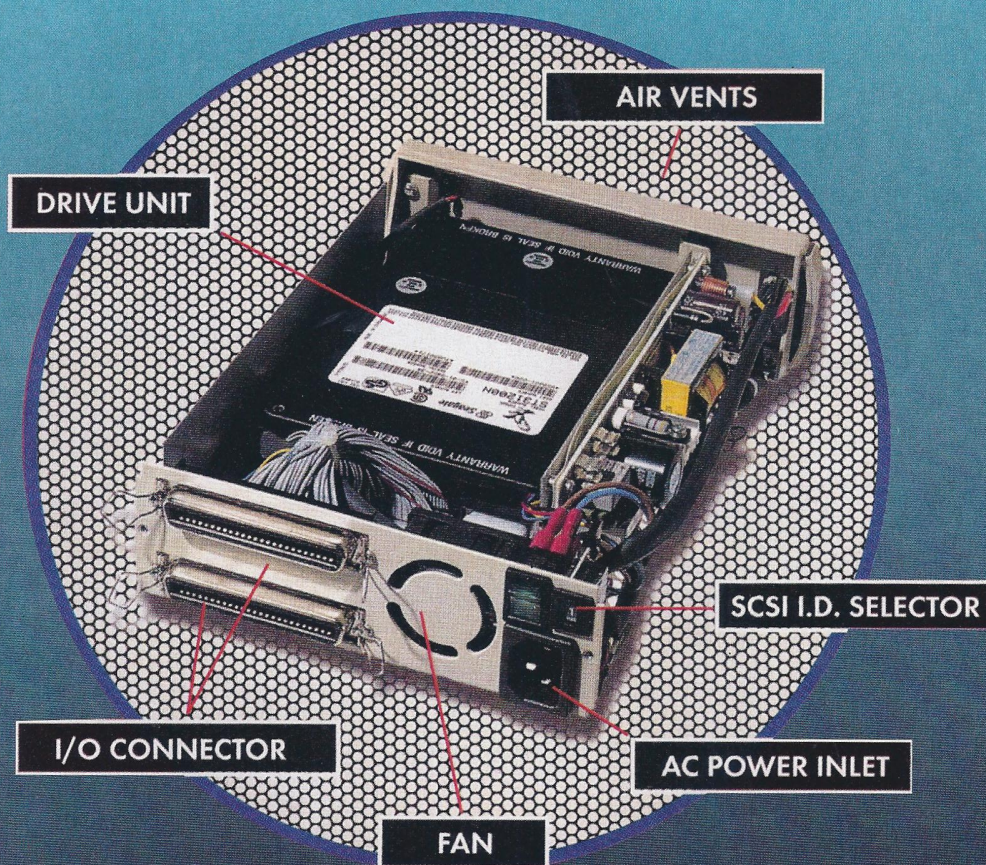
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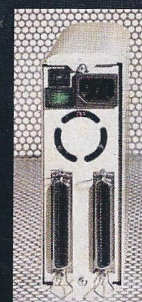
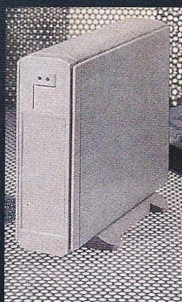


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Picture shown is of PC screen display, ST displays borders. Actual screen size 10.75 inches

- Fully compatible true high resolution monitor
- 14" Flat screen SVGA Monitor
- Tilt Swivel Stand
- .28 Dot pitch
- Includes ST Adaptor with built in sound
- 3.5mm Line out jack included
- When connecting to an STE we recommend using amplified speakers as STE monitor sound output is very quiet.

Only £99.99



Star LC240 24 Pin Mono	£134.99
Star LC240C 24Pin Col	£149.99
Citizen ABC 24Pin Colour	£169.99
Cannon BJ10SX Mono Inkjet	£189.99
HP DJ320 Colour capable inkjet	£229.99
HP DJ540 Colour capable inkjet	£269.99
HP Colour cartridge	£26.00
Centronics Printer cable	£3.00
Many other Printer peripherals/consumables available. Phone for details.	

Ladbroke Computing International are one of the longest established home computer dealers in the UK. We have developed an extensive customer service policy which involves testing of all hardware prior to despatch, to ensure that goods arrive in working order. Offering free advice and support over the phone and keeping customers informed. Although our prices are not always the cheapest, we do endeavour to offer consistently good service and backup.

All prices/specifications are correct at copy date 25/5/95 (While stocks last) and are subject to change without prior notice.

Ladbroke Computing

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TEL 01772 203166
FAX 01772 561071**

How to Pay

You can order by Mail, Cheques/Postal orders made payable to Ladbroke Computing. Or give your credit card details to one of our telesales staff.

Delivery

Postal delivery is available on small items valued less than £40 (Normally £3), phone for details. For orders above the value of £40 this will be charged at £7 for insured courier. Saturday Delivery £20. All the above prices are for mainland U.K.

All Prices Include VAT

Repair Services

Our Atari trained technicians can repair ST's in minimum time at competitive rates. We can arrange for fully insured courier pickup and return delivery of your machine to ensure it's safety. We even have a same day service which will ensure your machine is given priority and, subject to fault completed the same day.

We can fit memory upgrades, PC Emulators, ROM upgrades etc.

We offer a quotation service for £15 for which we will examine your machine and report back with an exact cost for repair. If you do not wish to go ahead with the repairs then just pay the £15. However if you do go ahead then the quotation fee is included in the minimum charge.

Please note: the minimum charge covers labour, any extra parts are chargeable.

Quotation	£15
Minimum Repair charge	£35.25
Same Day Service	£15
Courier Pickup	£11
Courier Return	£7

Marpet upgrades for the STF(M) are plug in and require no soldering providing MMU and Shifter chips are socketed (phone for details).

The Marpet board allows connection of standard "SIMM" memory boards (see prices below).

Unpopulated Marpet	£22.00
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Disk Drives

Zydec External 3.5"	£57.99
Includes own external power supply unit.	
ST internal drive	£19.99
Double sided double density mechanism for upgrade or replacement. Case may need modification. Phone for details.	

Eclipse Mouse

290 dpi switchable ST/Amiga mouse. 2 microswitched buttons. Free mouse mat.

£8.99

"SIMM" Memory modules

All SIMM upgrades come complete with test disk and instructions. Most STE's are compatible with SIMM's however please check existing boards before ordering (phone for details)

2 x 256K SIMM's	£4.99
2 x 1Mb SIMM's	£44.99
4 x 1Mb SIMM's	£89.98
2 x SIMM to SIPP adaptors	£3.00

Memory Upgrades

Marpet upgrades for the STF(M) are plug in and require no soldering providing MMU and Shifter chips are socketed (phone for details).

The Marpet board allows connection of standard "SIMM" memory boards (see prices below).

Unpopulated Marpet	£22.00
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Letters

A fond farewell

Just a note to say how regrettable it is that Vic has had to resign from Atari World due to illness. I just wanted to say that everything of his that I have read over the past three years or so has invariably been informative and entertaining. That of course goes for the editing on both magazines and I hope that Andrew manages to keep up his standards.

Ken Johnston.

Well, I have had to do it *again*! When Atari World was first launched I had to write a letter of sincere welcome, and now once again a goodbye to Vic Lennard. He will be sadly missed by a great number of Atari owners and users. Hope for a return to full health Vic and again, many thanks!

Andrew, can I welcome you to Atari World editorship. Most ST Review & ST User readers will know of you. Carry on the good work and continue producing (on time?) this excellent Atari World. What a welcome return to a computer magazine that really does not require a degree in computers to understand. I consider this magazine even better than ST Review and I can only conclude in wishing the entire team all the best, and please, please continue to supply more of the same; it gets better and better with every issue.

Ron Clewer, Sussex.

These are just two of the many letters (and e-mails) we have received, thanking Vic for his work on Atari World and wishing him a speedy recovery. Needless to say, Vic will be missed at Atari World, but Andrew is determined to maintain his standards in continuing to produce the magazine you obviously enjoy so much.

Move over Arthur?

I am concerned about the honesty of computer companies who accept

Postbag duty falls to Nial Grimes this month. Needless to say, the power goes straight to his head.

registrations, subscriptions, and then do not honour their side of the bargain. The last case to surface was of a disk magazine that ceased publication, but still advertised and then suddenly decided to start up again under a different name.

We are forever being asked to subscribe to magazines, to register shareware and to keep our eyes open for pirate copies of commercial software, but what do we get in return? – Programmers who will no longer accept responsibility for their old wares, disk magazines that take our subscriptions and run, and now a commercial application offered at special rates to magazine subscribers. I personally have lost quite a large amount of money over the last year in unrewarded registrations and subscriptions. At least some of our well-known ST'ers are helping with overseas registrations; maybe it's time to start a similar idea for home software, or a published list of "welshers".

Derek Hunt, Cardiff.

I appreciate how it feels to lose money at the hands of unscrupulous software publishers, but as always the message must be "buyer beware". If you are thinking about registering shareware, why not write a letter to confirm that the program in question is still being supported? At least we can be grateful that more and more programs are being supported professionally by ST enthusiasts.

With regard to the Timeworks

special offer, you must remember that software is very similar to commercial music; in other words, it has a limited shelf life. Certain albums may contain some excellent tracks, but you'll still find them in the bargain basket after a year or two. I too paid full retail for Timeworks, but the service it has given me has more than compensated for the new, low price.

Voyage of discovery

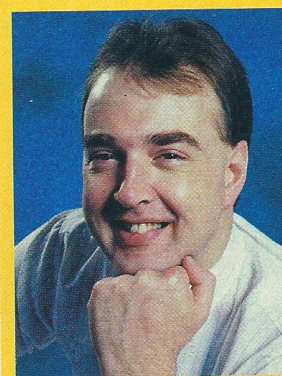
Many thanks for an excellent magazine. I have bought every issue so far and will probably subscribe. In common with many other musicians, it was the sequencing aspect which first drew me to the Atari. I should say that strictly speaking the Atari was not my first computer as I was already using an Amstrad NC-100 Notepad for word processing. When I bought my second-hand 1040 STe though, a whole new world opened up. Since then I have tried to learn as much as I can about practical computing in as short a time as possible. I am constantly amazed by the power and sheer flexibility of my Atari. It has become a portal to a whole new voyage of discovery.

I recently added an external disk drive to my STe and am contemplating a memory upgrade. In the near future I hope to add a hard drive and some multi-tasking software. Although I do not currently have Internet access or experience, I certainly want very much to expand in this direction. I am watching the development

of the Atari 'Net scene with great interest...

There is so much to learn, which is why I appreciate Atari World. I am certainly looking forward to learning more about desktop publishing with Timeworks.
Stefan Coburn, Brighton.

Firstly, let me apologise for trimming your letter so savagely. However, I felt I had to publish some of it, because your experience of computing (and more specifically, the Atari) reflects so well the feelings of many home users – there is always something new to learn, and home computers such as the ST are an ideal starting point. As an aside, I am sure you will enjoy both the Timeworks software and tutorials – turning your ideas into printed masterpieces really is one of the most exciting aspects of computing.



Write to Wright...

Send any letters to
**Andrew Wright at
Atari World,
either to the address on
page 98 or via email to
atari_world@cix.
compulink.co.uk.**

Glidepoint



Andrew Wright looks at some new pointing technology – the Glidepoint mouse replacement.

The ALPS Glidepoint – a novel way to point.

When Atari designed the ST, the common or garden mouse was new technology. Very few computers, apart from some Apples, used them and there was no standard interface. Atari, quite logically, designed its own and the simple plug-in operation went a long way towards making the ST easy to set up and use.

Once the mouse replacements such as trackballs started arriving, however, the ST's proprietary port was a problem. Luckily there is a solution. On the PC, mice and other pointing devices like the Tabby graphics tablet plug into the serial port. With a simple driver, such devices can be plugged into the ST's serial port.

As most PCs have 9 pin serial ports and the ST has a 25 pin one, a special converter is required but these are not very expensive. The Tabby tablet has its own special driver but if you want to plug in a PC mouse (and there are many nicely shaped, high resolution ones available) you need a software driver like Mouse 2.3 (reviewed in a recent PD Arena) or Mouse Tricks 2.

The latest pointing technology is the touchpad which was first used on notebook computers but which is now available as a standalone mouse

replacement. The ALPS Glidepoint is a small pad with a touch and movement sensitive area measuring 5.5 by 4cm set inside a plastic case measuring 7.5 by 6cm. You can move your finger around on the pad to control the mouse pointer and tap it lightly to register a single left mouse click or tap it twice in succession for a double click.

Bye bye mouse

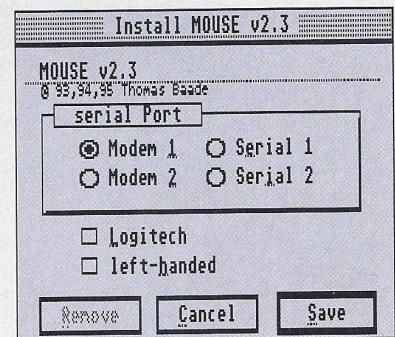
There are also three buttons on the Glidepoint, one that acts as a left mouse button (used as an alternative to tapping the pad and the other to act as the right button. The third button can only be programmed if you happen to have software capable of doing so. However, Mouse Tricks 2, a neat little utility available from the FaST Club on 0115 9455250, will emulate a three button PC mouse and it might be well worth investigating.

The Glidepoint is a robust device that won't get dirty or clog up with fluff. It's also light and comfortable to use though the fast response – it has a resolution of 400 dots per inch – takes some getting used to. I have to say that it has taken me a month to feel comfortable with this odd device but now I find a mouse clumsy and annoying. Strangely enough, my children found this much nicer to use, indicating that users who don't spend all day using a mouse might well find the Glidepoint technology easier to pick up.

The Glidepoint is ideally suited to small, cramped desktops where space is at a premium. You can dispense with a mouse mat, for a start, and it won't be long before users come up with all sorts of ideas about where to put the pad itself – mine sits quite happily on top of

the ST/Falcon casing when I'm not doing mouse-intensive work. It may also be useful for disabled users or those with hand and arm disabilities that make using the mouse uncomfortable.

The biggest obstacle at present is the price but that will drop quite quickly as more and more are sold. In fact, the next generation of portable PCs will probably have the Glidepoint technology built in, judging by the enthusiastic reception the Glidepoint has received from portable PC and Mac users.



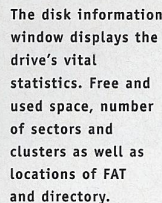
Mouse 2.3 is a shareware serial mouse driver that works well with Glidepoint.

Technology briefing

The Glidepoint pad consists of two layers of electrical conductors which are touch but not pressure sensitive. It works by responding to the smallest change in the electrical field and despite its size, you can easily be as accurate with this type of pointer as you can with a mouse. Note that you can't substitute finger for a pen or other solid object – the electrical connections obviously depends on human contact. Because there are no moving parts, the product is likely to be fairly reliable although at present it is a little too early to tell.

GLIDEPOINT	
	Requirements: Falcon 030 or ST with 9 pin serial adapter Pros: Light and portable • easy to use • accurate Cons: Needs driver • takes practice
Manufacturer: ALPS UK distributor: Datrontech Contact: 01252 303333 RRP: £65	
SCORE: 6	

Edge



deleted files which it does with the aid of Diamond Mirror. This miracle is possible because deleting files does not really erase the data on the disk - the area is marked as re-usable instead. At this point, simply unmarking the area fully restores the file. The downside is that this only works well for non-fragmented files. To counteract this, Diamond Mirror keeps track of disk data and enables Edge to undelete files that are normally unrecoverable.

Diamond Mirror is configured to run at startup by default. It resides in the Auto folder and is programmed to make a backup copy of the most important data on your hard disk - the FATs and directories. This is in case of data corruption also performs a disk user defined intervals

Diamond Mirror Configuration

Test?

Mirror?

Select All Drives Clear All Drives

Frequency of selected operations:

Test? ☒ Every Startup ☐ Once a Day ☐ Once a Week

Mirror? ☒ Every Startup ☐ Once a Day ☐ Once a Week

Path to save SCSI and Disk Mirror files:

L:\EDGE\MIRROR\

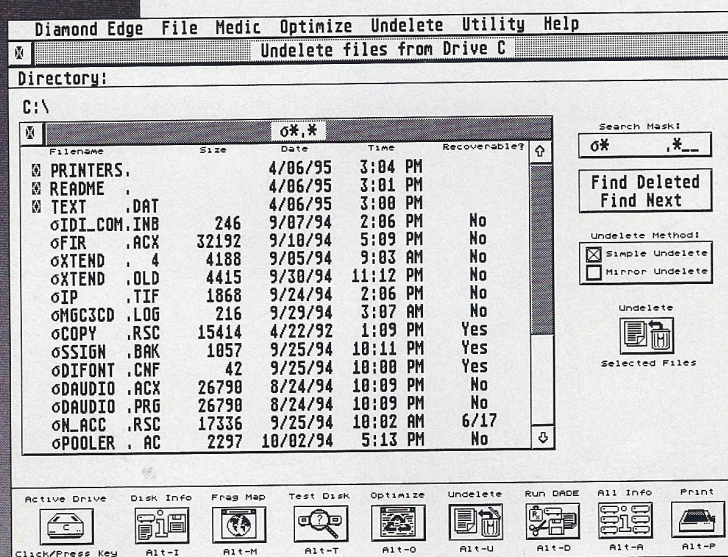
Save Configuration Cancel

The disk editor employs three editing levels - device, drive and file. It can be launched from Edge or directly from the desktop. This program offers the more

Diamond Edge 2

The FAT editor can be a powerful device in the hands of the expert or the equivalent of a self-destruct button in a novice's hands.

DADE File Edit Options				
Decode/Display FAT #1 of Drive F #Clusters: 15562				
2: Normal EOF.	3: Normal EOF.	4: 156,157	5: 158,159	
6: 160,161	7: 162,163	8: 164,165	9: 166,167	
10: 168,169	11: 170,171	12: 172,173	13: 174,175	
14: 176,177	15: 178,179	16: 180,181	17: 182,183	
18: 184,185	19: 186,187	20: 188,189	21: 190,191	
22: 192,193	23: 194,195	24: 196,197	25: 198,199	
26: 200,201	27: 202,203	28: 204,205	29: 206,207	
30: 208,209	31: 210,211	32: 212,213	33: 214,215	
34: 216,217	35: 218,219	36: 220,221	37: 222,223	
38: 224,225	39: 226,227	40: 228,229	41: 230,231	
42: 232,233	43: 234,235	44: 236,237	45: 238,239	
46: 240,241	47: 242,243	48: 244,245	49: 246,247	
50: 248,249	51: 250,251	52: 252,253	53: 254,255	
54: 256,257	55: 258,259	56: Normal EOF.	57: 262,263	
58: 264,265	59: 266,267	60: 268,269	61: 270,271	
62: 272,273	63: 274,275	64: 276,277	65: 278,279	
66: 280,281	67: 282,283	68: 284,285	69: 286,287	
70: 288,289	71: 290,291	72: 292,293	73: 294,295	
74: 296,297	75: 298,299	76: 300,301	77: 302,303	
78: 304,305	79: 306,307	80: 308,309	81: 310,311	



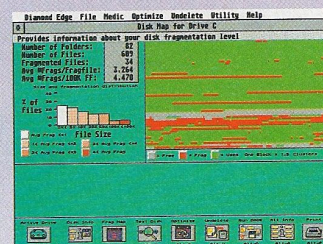
Edge can come to the rescue if you delete a file by mistake. The quicker you try this feature, the more likely it is to recover the file.

File fragmentation

A hard disk is divided into small regions called sectors. When you first get a hard disk, all sectors except a few are blank and unused. When you save your first file onto the hard disk it may occupy sectors 1 to 10. The second file will therefore occupy sectors 11 to 20.

Fragmentation begins to occur if you load the first file which may be an image file and edit it so that it is now bigger, requiring 14 sectors to store. It will most likely end up in two fragments - in sectors 1 to 10 and 21 to 24. It is easy to see how, as you carry on editing, saving, deleting and copying, your files can become heavily fragmented.

All this goes unnoticed and files on the desktop or file selector appear as they would normally. So why is this a problem? There are two reasons. First, having the files all over the place causes unnecessary disk head movement. Instead of reading the file in one stroke, it has to jump through several disk locations, slowing down disk access. The second problem is that fragmentation makes it very difficult to recover data from the disk when something goes wrong.



File fragmentation can slow down disk access. The screen above shows fragmented files in red.



This image displays the same files after the drive was optimised using Diamond Edge.



experienced user the chance to view and modify data directly on disk. This can be handy if Edge fails to recover some data.

Whichever of the three modes you select, DADE opens a window displaying 256 bytes on screen. The window uses two scroll bars and a number of buttons, also accessible via the function keys on the keyboard. The data is displayed in HEX values as well as ASCII and editing can take place in either.

DADE maintains an edit buffer so that you can always undo your edits. In addition, DADE also supports the standard cut, copy and paste functions. There is an extensive find and replace facility as well as a powerful FAT editor. A clever GoTo facility enables you to quickly jump into the FAT, directory or boot sector. DADE's user interface is somewhat better than Edge and is more in line with other GEM programs.

Verdict

Diamond Edge remains a must for every hard disk user. It is fast and powerful and if version 1 is anything to go by, reliable as well. The use of GEM is

rather curious though: dialogue boxes look very much like standard movable windows - only they aren't! When you try to move them, the computer just beeps at you.

This is confusing and offers no benefits to the user. In addition, minor redraw problems occur on the Falcon with or without extensions like Winx and Magic. Despite this, the package is quite easy to use, with all the functions organised logically. The built-in help system is useful but it could do with an improved interface. The 74 page manual is also very good indeed and the disk editor is a big step forward. If you have a hard disk, Diamond Edge should be pretty high up on your shopping list.

DIAMOND EDGE 2.02

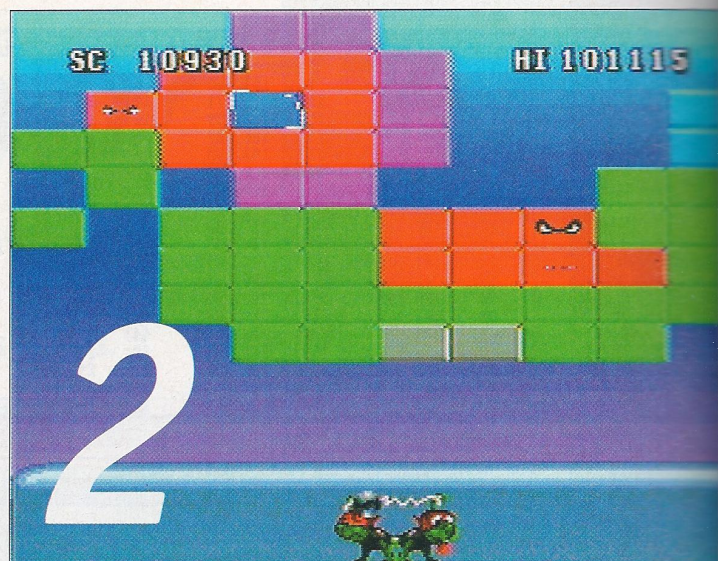
Publisher: Oregon Research
UK distributor: HiSoft
Contact: 01525 718181
RRP: £49.95

Requirements: Any Atari, medium resolution or higher.
Pros: Prevents data loss • aids data recovery • looks good
Cons: Confusing user interface

SCORE: 8

If you like platform games, they don't come much bigger and brighter than Zool 2. Iain Laskey looks at the Jaguar version of this award winning game.

Zool 2



Even the blocks in the bonus round are mind-numbingly colorful.



Level upon level of smooth, fast action await you in Zool 2.

Zool 2 has been released on just about every machine around and has now arrived on the Atari Jaguar. This version has been enhanced and claims to be the

fastest, most colourful version of all.

When the game first starts there is a nice ray-traced intro sequence of Zool before the main screen appears. You can play as either Zool or his female sidekick Zooz. The options screen lets you choose the difficulty level, whether inertia is active and the number of players. When in two player mode, you can use one or two controllers.

The gameplay is certainly fast. Unfortunately it's also very repetitive. Each of the seven levels involves avoiding or shooting the enemies and collecting the vari-



Secret rooms full of tooth rotting goodies are never far away!

ous items that are liberally littered around the game. There are the obligatory power-ups to be collected including bombs, a second ninja and shields. If you can collect 3 Zoon tokens, you get to play a special bonus level.

Own flavour

Each level has its own flavour with different sprites and backgrounds although the basic game is identical in each case. The first level is fairly straightforward and the graphics, especially the



backgrounds are rather lacklustre. The later levels are generally nicer looking though and provide more of a challenge.

It's not always obvious how to go about completing them and often some split second timing is required to navigate your ninja around. The Bulberry Hill level has tubes that accelerate your ninja upwards with a wild spinning rather reminiscent of Sonic games. There are also fried eggs and trampolines to jump on to get the height needed to reach some parts of each level.

The controls are easy to get to grips with. Only the A, B and C buttons are used along with the joystick. It makes a nice change from having to remember a set of commands as long as War and Peace but there are a few special moves including "power-jumps".

Graphically Zool is easily as good as any 16-bit console but not that much better. There is no slowdown even when

Zool and Zooz each have their own skills, but the gameplay remains the same regardless of who you choose.

the action gets furious and the parallel scrolling works well enough. There is the odd pleasing detail such as the eyes on the huge Egyptian death masks following you around. The colours are bright and breezy but overall, the game looks like it's aimed at the younger audience rather than the more discerning gamer.

The sound is certainly never far from your thoughts when you play. The tunes are worryingly catchy and all kinds of weird and wonderful sounds ring out as your ninja dashes about shooting and collecting. It sounds like the sort of game Jeff Minter would have written!

A real let down is that you cannot save your current position although high scores are saved along with SFX and music levels.

At best Zool 2 is competent. It's well programmed but the game itself is unexceptional. The Jaguar sorely needs a killer platform game to rival the Sonics and Marios of the world. Unfortunately, this isn't it. Hopefully, Ubisoft's new game, Rayman will be the Jaguar platformer that others will be looking up to. Until then.

Z O O L 2

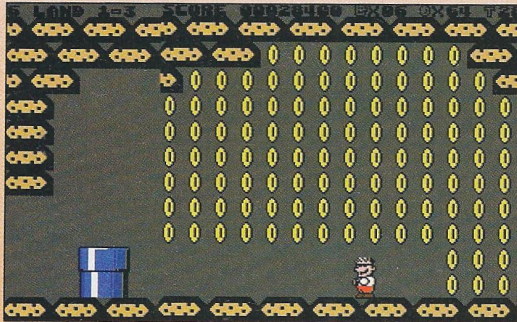
Publisher: Atari
Telephone: 01753 533344
RRP: £39.99

Pros: Fast and frantic • big bright levels
 • cheaper than most.
Cons: Repetitive • no game save.

SCORE: 5

Super STario Land

Mario meets STario; Richard Barton takes care of the intros...



Collect the coins; flatten baddies – that's about it really...

Mario would feel at home in Super STario land, in fact he'd be hard pushed to tell the difference! Whether STario's boyish looks will be enough to keep the big boys off Top Byte's back remains to be seen.

Don't be fooled by the idiotic grin on our hero's face – he soon figures out that things to eat and drink are good and the cute cuddly creatures are bad so it's just like real life, is it not?

Boulders contain coins or power ups

and it's worthwhile head-butting them all to avoid missing the power ups. Collecting 100 coins is rewarded with an extra life. A swig of red potion transforms STario into Super STario, picking a plant adds fireballs to STario's arsenal and catching a star adds invincibility and so on and so on.

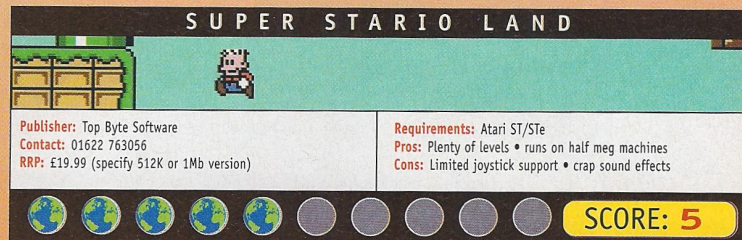
Jumping on the nasties is enough to dispatch most of them but a few require special measures. Holding down the fire button enables STario to jump higher and run faster which makes it easier to jump out of - or into - trouble!

The background music is inspirationally challenged and the

sound effects are barely adequate.

Silent bees on a 512K version is understandable but surely it's not too much to expect a buzz from the bees in the 1Mb version?

A high score table always adds a competitive edge but they can't be saved to disk and although keyboard and joystick control is provided, high scores and new games can only be selected using the keyboard. In all though, Super STario Land brings another classic game to the Atari platform and should be welcomed with open arms by parents under pressure to buy expensive alternatives!



Brenarvious

Richard Barton dreams of being rescued by Sigourney Weaver...

Inside the barren planet Brenarvious, Safren Gyuer runs an automated mining complex. Suddenly unexpected tremors strike and slimy pods start falling onto the platforms below. The complex starts to collapse and the pods begin to mutate into unfriendly aliens. Basically, in case you hadn't guessed, it's definitely time to leave!

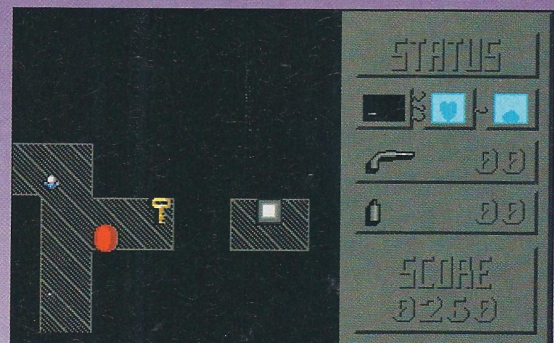
Unfortunately the mining company don't see it that way and won't release the escape craft until all the Trifidian ore has been collected so it's up to you to guide Safren through the complex.

Movement is hampered by sluggish joystick response but the gameplay is addictive enough to make perseverance worthwhile. Other rooms are entered by

moving to the end of a platform which automatically displays the next screen but take care because it's easy to walk off the edge of the platforms and it's a long way down! A successful foray must strike the right balance between destroying aliens and pods and collecting health parcels – the right strategy requires a measure of good fortune!

Aliens and pods can be destroyed using a blaster or grenade and refills are scattered around the complex. Any contact with aliens or pods saps your strength which can be revitalised by collecting health parcels. The pulse rate in the status display is supposed to increase as health decreases but the difference is far too subtle and some other visual/audio feedback would be an improvement.

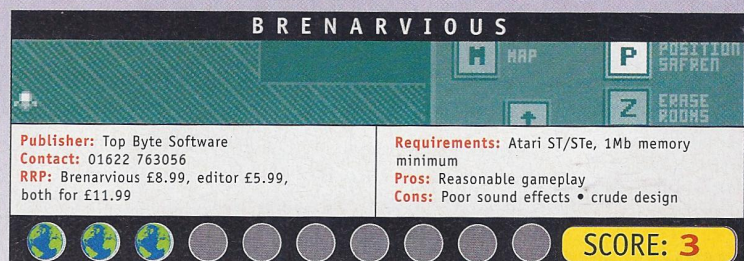
Luck plays an important role as random energy



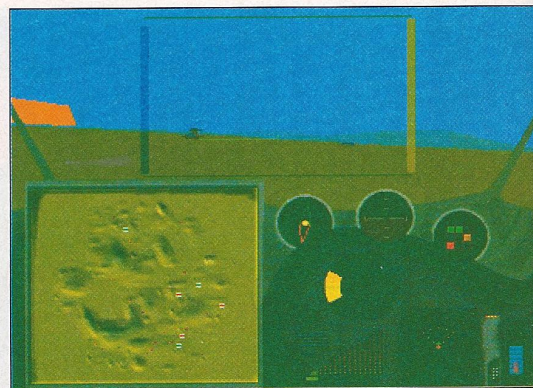
Keys, health packs and unconvincing aliens are littered throughout the complex.

surges and falling rocks can easily dent your escape plans. However, the optional editor makes it possible to change existing layouts or create entirely new ones. The controls are keyboard based and although not intuitive, they work well enough.

Brenarvious is similar in concept to Intruder Alert and Robotron but it simply doesn't measure up to either its peers or the quality of some non-commercial software.



Hover *bowver*



Enemy hovercraft, eleven o'clock! Full ahead both Mr Christian!

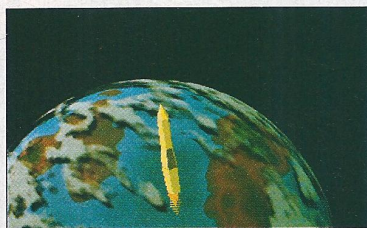
Gravon boasts three-dimensional, true-colour graphics and luscious stereo sound. Could this be the game Falcon owners have been waiting for, asks Nial Grimes?

Pinball Dreams and Llamazap have proved just how well the Falcon can handle traditional game designs, but the fast processor and DSP are just begging to be used for advanced three dimensional graphics. Gravon sets out to exploit this potential.

The game is perhaps best described

as a ground-based flight simulator.

You take control of a futuristic armoured hovercraft in an undulating three dimensional world, filled to the brim with enemy



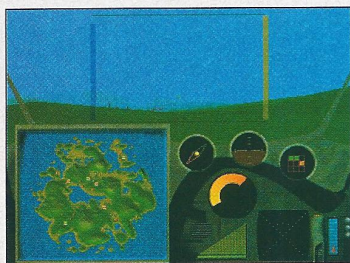
Animated sequences of your craft arriving or leaving are shown in between missions.

tanks and helicopters. There are a whole string of missions to complete, but before you dive head first into the action, some training is needed. Piloting armour-plated flatulence isn't as easy as it looks you know.

No train, no game.

In fact, the tricky controls are as much

a part of Gravon as the missions themselves. Both the mouse and joystick play a part in controlling the beast, which can naturally, slide sideways, backwards, diagonally and in any other



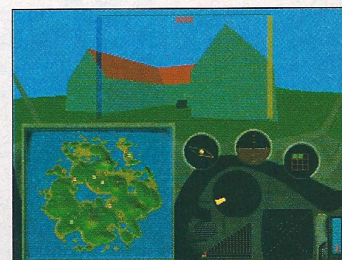
The mist that hangs over the water and certain villages lends a realistic feel to the graphics.

direction you'd care to mention. The training course aims to help you to get to grips with the controls by pointing out which way to move the rudder to slide smoothly through a succession of "gates".

With the practice session safely out of the way, you are guided straight into the first real mission, the aim being to rescue some important secret messages that have been cunningly hidden in enormous crates scattered around the planet surface. Each of the targets are highlighted clearly on a map that sits in the lower left of the screen.

Subsequent missions follow a similar pattern – just blow things up or collect them as directed. A code is handed out as you complete each level, so you don't have to go through the training process a second time. Jaguar owners will recognise the gameplay as being quite similar to Cybermorph, and the sultry "well done" as you complete even the simplest of tasks serves to reinforce that feeling.

Although the graphics don't quite match Atari's Jaguar 3D-fest, they do provide a good feeling of scale. Plenty of polygons are used to make up the landscape and the fog that clouds the distance is really quite spectacular. Other landmarks, such as galleons and churches serve to make the scenery more interesting, and the cut sequences of your craft leaving each planet add an extra touch of class. Quality music maintains the atmosphere between missions.



The aim of the first mission is to collect these inconspicuous secret messages

"Well done"

If you used your first ten minutes' play as a gauge of overall game, Gravon would bomb badly – it is very frustrating early on, especially as the training session demands more precision than most of the actual missions. However, perseverance does pay and there's an enjoyable game lying just over the brow of that steep learning curve. Fine control remains awkward but that's something you just have to cope with.

Overall, Gravon is a worthy Falcon outing. The three dimensional graphics are genuinely better than anything seen on the ST and the gameplay is quite deep. If you feel you can spend some time mastering the controls, it comes recommended.

GRAVON	
Publisher: JRC Contact: 01628 72173 RRP: £TBA Requirements: Falcon030, 4Mb memory, hard disk.	Pros: Good 3D graphics • nice soundtrack • lots of missions Cons: Tricky control system • annoying training session
SCORE: 7	

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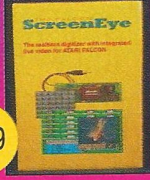
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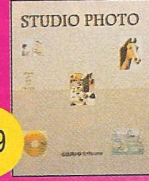
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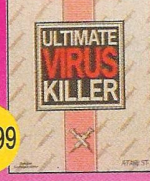
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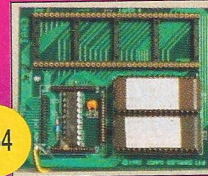
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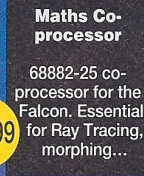
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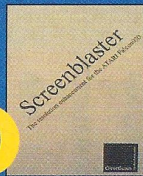
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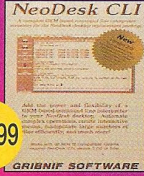
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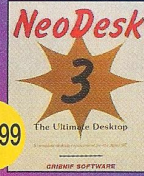
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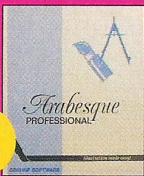
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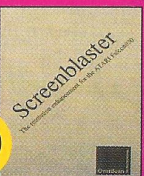
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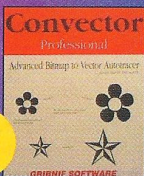
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UPGRADING AN STM

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What's new pussycat?

What does the future hold for the Jaguar and its competitors? Nial Grimes wrestles with the cold, hard facts...

The Jaguar simply cannot fail – that was the general opinion of the computer press when Atari's big cat was

first unveiled. Based on a dream-team of RISC processors huddled tightly around a 64-bit wide data bus the Jaguar certainly had the power to take the market by storm and the closest competition was either overpriced or nowhere near release.

And yet here we are a year or so down the line and you are still hard pushed to find a running Jaguar in a high street electronic emporium. What's more, those once distant 32-bit machines from the console giants are just beginning to land on our

shores. What are Atari doing to make their machine a success and is it really worth investing your hard-earned cash in a Jaguar system?

Checkmate

The next generation console war is going to be fought over software and marketing, and even the staunchest Jaguar supporter would be hard pushed to see much evidence of either from Atari. Of course, the fact that you can still count the truly excellent games on the fingers of one hand is obviously as much a concern for Atari as it is to the leagues of potential Jaguar owners. However,

that situation is changing; the long-promised wave of next generation software is close to breaking.

Part of the reason for the delay is that Atari has been keen to use independent software houses. This allows prolific programmers such as Jeff Minter to exercise their creative talent and instinctive knowledge of what a playable game should be like. The drawback is that these games – Defender 2000 and BattleSphere for instance – take longer to produce.

Backing up the emerging software armoury is a range of exciting hardware. Despite numerous delays, the CD unit is finally approaching release (yes, really) and the virtual reality headset at least proves that Atari is still



A new Jaguar pack is quite likely to appear before Christmas – will A vs P be the bundled game?

committed to innovation. The mention of a Worldwide Web browser and the software compatible Jaguar II at a recent stockholders' meeting are equally exciting. However, adequate software and hardware support do not guarantee sales. What is being done to get the machines onto (and off of!) the shelves?

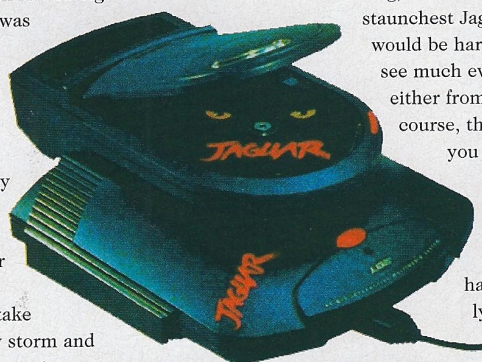
The final frontier

The Jaguar has sold relatively well in the USA and sales of over 40,000 machines in the UK are also encouraging, considering the lack of availability and advertising. Although such figures can't compare with the degree of success enjoyed by the Segas and Nintendos of this world, you do have to remember that Atari is quite a small company.

Bearing this in mind, they intend to ride on the back of the publicity campaigns generated by Sony and Sega. If all goes according to plan, every kid in the country will want a next generation console for Christmas. Daddy and



Independent software houses are capable of producing some very original and playable games – Iron Soldier for instance.



The CD unit is due for release in August, opening the way for more advanced software.



Affordable virtual reality will arrive on the Jaguar within the next year.

Mummy will be faced with the choice of buying a Saturn, PlayStation or 3DO for £300-£400 or a Jaguar at £149. Both Atari and its competitors just need to hope that consumers are ready to dump their Super Nintendos and Megadrives in favour of something more powerful.

The success of this approach will of course depend on a good pack-in game, effective advertising and positively saturated high street stores. All of these ingredients are promised. Mock-ups of a Jaguar with an Alien vs Predator pack-in were on show at the Electronics Entertainment Expo, and rumours of a

\$99 Jaguar by Christmas abound. The long-promised high-street roll-out is pencilled in for September (1995, that is)...

Crunch!

Cynics could easily look at the current Jaguar situation and mutter the immortal words: "great product, shame about the marketing." However, Atari is starting to make positive moves (or at the very least, noises) in this department. It's unlikely that the Jaguar will dominate the world but then it doesn't need to! Remember, the Megadrive and

Super Nintendo have coexisted quite happily in the UK marketplace, and there's no reason to think that the Jaguar, Saturn, and PlayStation can't get along equally well.

However, in order for the Jaguar to survive and prosper, Atari need to sell enough machines to make software development really worthwhile; this Christmas is the time to install that user base. With titles such as Rayman, White Men Can't Jump and Fight For Life backing up Alien vs Predator, Iron Soldier and Tempest 2000, the Jag will make a great buy at £149

Sega Saturn

Price: £399

Availability: Now

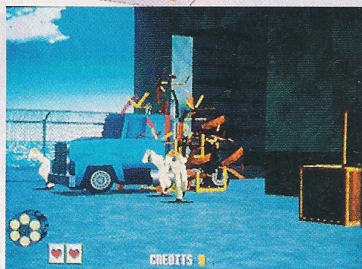
Prospects: Good

Sega has enjoyed tremendous success in the UK and Europe with the Megadrive, and the Saturn is the company's main tool in the 32-bit war. It's a CD system based around two RISC processors and combines awesome 2D potential with good polygon abilities; Sam Tramiel has gone on record as saying that the Saturn is on the same plane as the Jaguar in terms of power. Although the price is higher than that of the PlayStation, Sega's excellent marketing ability and strong arcade links guarantee a good level of sales.



The Saturn is already vying for attention alongside the Jag and 3DO; £399 to you guv!

Sega's arcade pedigree ensures a degree of success for the Saturn - Virtua Cop (pictured above) will be available shortly.



Sony PlayStation

Price: Unannounced (around £300)

Availability: September

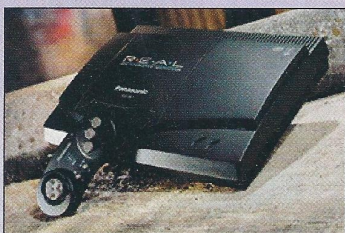
Prospects: Excellent

This is the console to watch. Not only does Sony's PlayStation have the backing of one of the world's largest entertainment corporations, but it also happens to be an incredibly powerful piece of kit. Its flawless conversion of Namco's Ridge Racer has demonstrated that fact well. However, the PlayStation is not likely to hit the UK at less than £300 - reports are to be believed.



The PlayStation is a great machine, but it remains to be seen how many people will actually pay £300 for a games console.

Titles such as Ridge Racer and Wipeout amply demonstrate the PlayStation's 3D abilities.



Panasonic is just one of several companies committed to the 3DO platform.

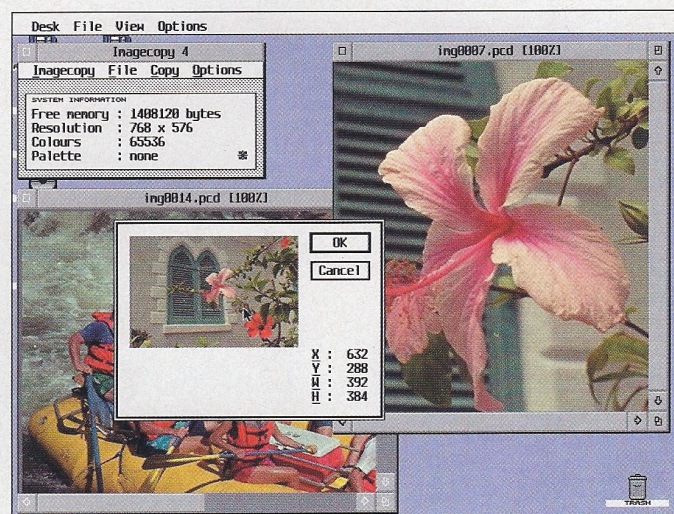
M2 promises amazing power and will be available as an upgrade for existing 3DOs.

3DO Price: £399 Availability: Now Prospects: Fair

3DO is a modern day MSX - a homologous hardware platform manufactured by a consortium of companies. Despite a good catalogue of software, the machines have failed to live up to expectations in the marketplace and the initial high price point certainly didn't help. Details of 3DO's successor, codenamed M2, have recently been announced and are outstandingly impressive - it will be available as an upgrade for existing machines so the future of the platform is beginning to look slightly brighter.



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The ultimate Image utility for Atari computers

Theme Park

If you thought theme parks were fun places to visit, just try running one. Iain Laskey did and look what's happened to him...



It was about 6pm. I put the kettle on, booted up Theme Park and started to play. After what seemed like half an hour, I realised I hadn't made the tea. I glanced at my watch – 1am! OK, so



Research leads to more interesting rides and extra customers...



It's very easy to expand your park, as long as you've got enough cash to spare.



The advisor guides you through the initial stages of opening a park – after that, you're on your own.

where did the evening go? The answer is Theme Park.

Before you build your park, you need to buy land. Initially only the UK is open to you as it's free.

Later on when you've made some cash, you can move to different countries where the big money can be made. Next you choose which rides and food stalls you wish to add. Connect them up with some paths, add a few trees and a toilet or two and then open the doors to your public.

As the park starts to fill up, you need to keep an eye on everything. Litter can easily build up unless you hire a few cleaners. Rides can break down too requiring a crew of engineers to fix them. If you aren't quick enough with the repairs, the ride will explode, killing the occupants and doing your parks reputation equal damage.

As the months pass, the takings build up enabling you to purchase further facilities. You can invest in research for new items to help give your park an edge over the competition. If funds get low, borrow from the bank but be sure you can handle the interest payments.

You also need to keep an eye on your customers. You can check how happy they are and if they have any

wants such as more food. If they get too unhappy, the word will get out and attendencies will fall. At the end of the year you can decide to continue building or to sell.

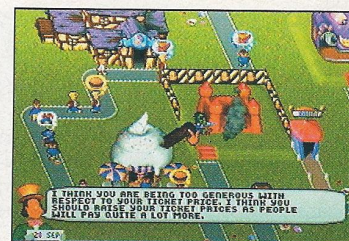
Park keeping

As your park grows, you need to install enough signposts to help your customers find the best rides. As time goes by you also gain access to more sophisticated attractions. Any which aren't doing too well can be closed down and better ones built in their place. If any employees are under performing, you can sack them and hire better ones.

Along the way you have to deal with pay disputes, rising inflation and even other parks buying your shares. It's a constant battle to keep your park at the top or even just profitable.

The graphics are amusing with some great animation on the various rides. Considering the original was designed for a PC with a high resolution monitor, the programmers have done a sterling job of keeping so much detail whilst making it playable on a TV although the screen seemed to be slightly too wide for mine and I couldn't see the left hand side. You may have better luck. The audio is good enough with plenty of spot sound effects and tunes. Given the constraints of a cartridge, there is a lot of game packed in.

The game save is limited in that you can only save when you sell a park

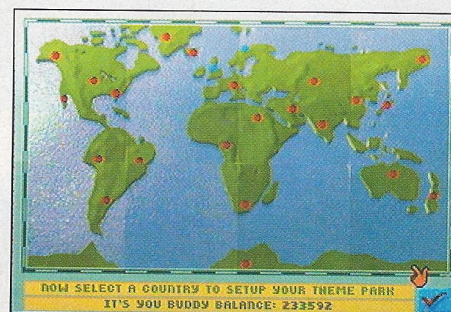


Staff are essential to keep customers entertained and to repair the rides; what use is a broken bouncy castle?

and all that is recorded is your cash and which countries you have built in.

The control system has been completely revamped for the Jaguar. I found it excellent, especially given the fact that the original used a mouse and menus. Top marks for this.

As is often the case, Theme Park is no 64-bit super game. It is however very good fun. It's lost very little in its transition from the PC and gained an extremely nice control system into the bargain. Well worth checking out.



Your park can be located almost anywhere in the world – thankfully, the British weather isn't simulated!

T H E M E P A R K

Publisher: Ocean
Telephone: 0161 832 6633
RRP: £49.99

Pros: Superb gameplay • addictive • good animation • good controls
Cons: Poor game save

SCORE: 8

Hoverstrike!

Bored with space ships, stealth fighters and tanks? Why not try a hovercraft? Iain Laskey looks at Atari's Hoverstrike and helps save the world. Again.

Hoverstrike puts you in the seat of a state of the art military hovercraft. Only you can defeat the

Terrakian pirates with

your firepower and cunning. Your task is to launch a pre-emptive strike in front of the main Federation armada, knocking out as many of the enemy as possible.

Hoverstrike follows the standard formula of having to complete various missions. Each one is based on certain terrain types such as water, ice or desert. After the short mission brief, a quick animated scene shows your craft being dropped by a mothership. At this point the mayhem begins.

This game is fast and furious. As soon as your hovercraft touches down, tanks, aircraft and other assorted nasties start to attack. It takes a little while to get the hang of the controls as your hovercraft behaves just like a real one. If you're flying forward and then turn, you don't suddenly change direction, rather you start to slide sideways, gently changing direction as you do so. You can either fly this way or use the brakes to fly in a go-stop-turn-go kind of way.

More weapons please!

Your main weapon is a photon blaster. Depending on the mission and the items you come across during the game, you can also have different missiles, mortars and flares. Your craft has a targeting system that can lock on to the nearest enemy allowing you to fire off guided missiles without having to worry too much about your accuracy.

Your hovercraft is equipped with a radar that shows primary targets,



The large, texture-mapped alien ships look impressive and the explosions are convincing.

Supplies of energy and ammunition are scattered around the surface of each planet.



The external view is useful while learning to drive your futuristic hovercraft.



enemies and bonus items in different colours. This helps enormously. Your cockpit also shows fuel and shields.

Once each set of missions has been completed, you move onto the next level and a new set of missions. The first ones are quite straightforward but even on level 2 you have some quite tricky fighting to do — and it only gets harder.

You can just play this game like a standard shoot 'em-up but you won't get far. Once you're past the early levels, you have to start using your head as well as your trigger finger. Some missions are virtually impossible unless you make strategic use of the terrain, dodging around hills and hiding in valleys, ready to ambush your target.

The graphics are a mixed bag. On the plus side, everything is fully texture mapped. Some of the enemy vehicles and targets are beautifully rendered and look very convincing. The

night time missions use shading to great effect creating an eerie sensation as you fly along in almost total darkness.

On the downside, the frame rate can be very choppy despite being fast. As you manoeuvre your hovercraft, it is all too easy to become disoriented as the walls and sky jerk about in a rapid succession of totally different views.



Hoverstrike's textures are nicely done, but the slow screen updates damage the overall effect.

The sound is adequate, the in-game effects are basic and the music is good enough but, overall, Hoverstrike is rather weak in this department.

There is only one game save and this has to be made when each mission has been finished. When you start the game, you have a choice of a new game or returning to the save.

Hoverstrike has some nice touches. The texture mapping is good and the pace is energetic, a bit like Cybermorph on speed. Unfortunately the poor sound and sometimes choppy animation detract from what could have been a much better game. Fly before you buy.



Battle Zone gameplay and lazy texture-mapped graphics — that's Hoverstrike!

HOVERSTRIKE	
Publisher: Atari Contact: (01753) 533344 Price: £49.99	Pros: Good rendering and text mapping • fast and fun Cons: Average sound • repetitive • choppy graphics
SCORE: 6	

Say cheese!

Live video capture on the Falcon is a reality thanks to Exposé! Grimes digs out his camcorder and sets off in search of some entertaining footage...



Movies can be recorded with a few mouse clicks, but you'll need plenty of memory to store them!



Apex knows no equal when it comes to creating photographic quality animations on the Falcon. However, getting hold of suitable images for morphs, warps and montages

can be a real headache.

Exposé is the solution. It forms a link between the real world and your Falcon, tapping a live video signal



Exposé grabs in realtime from any camcorder and the quality of the results is excellent.

from a camcorder or VCR directly onto the screen and allowing you to save still images or animations to disk. And make no mistake, this isn't a toy; the board works in realtime, meaning that your video need not have an impossibly still

freeze-frame and the images are captured in true-colour for optimum quality...

Lights, camera.

The Exposé package

consists of a small, internally mounted circuit board, an RGB splitter box and a cable to join the two together. If you shudder at the thought of violating your Falcon, fear not – it really is a doddle to install. Having removed the upper casing and shielding, the board simply slips gently onto the Falcon's internal expansion slots, allowing the video

cable to trail smoothly out into the waiting jaws of the RGB splitter. Space is tight inside the machine and a little effort is needed to make sure that the pins align properly, but care is the only skill required and the whole thing is very neat, requiring only a small hole to be filed in the casing.

Heart safely swallowed once again – no matter how easy the installation, switching on the Falcon again is always a tense moment – it's time to grab the camcorder and get down to business. Exposé can accept both composite and S-video signals via the splitter, which means that virtually any VCR or video camera is capable of supplying the goods. Apex Media completes the software side of the equation and having enabled the video signal, the current image is displayed in the top right hand corner of the screen. Several magical minutes ensue, as you see your office knick-knacks and posters pull into focus on the Falcon's screen!

Action!

Taking a snapshot of anything you film is a simple case of clicking a button within Apex, and animations are just as easy to siphon into memory. The number of frames captured per second depends entirely on the size of the image – at a diddy 128 by 80 you can expect a full 25fps, whereas a more detailed resolution of 512 by 256 nets around 6fps.

In either case, the quality of the grabs is outstanding, and the contrast, brightness and colour knobs on the splitter can be used to compensate for any deficiencies on the camera's part. Be warned though – true-colour animations gobble a *serious* amount of memory!

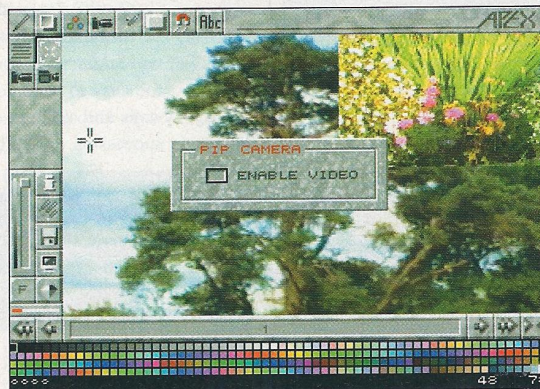
Several adjustments can also be made to pictures that Apex pulls from the Exposé board. "Interlacing" produces a more detailed picture if the camera is still and widescreen can be used to economise on memory. Some of

the image processing filters also come in handy when touching up single frames or complete animations.

And the results that you can achieve with Apex are just a foretaste of the things to come. A dedicated grabbing program entitled FalCAM Tripod is under

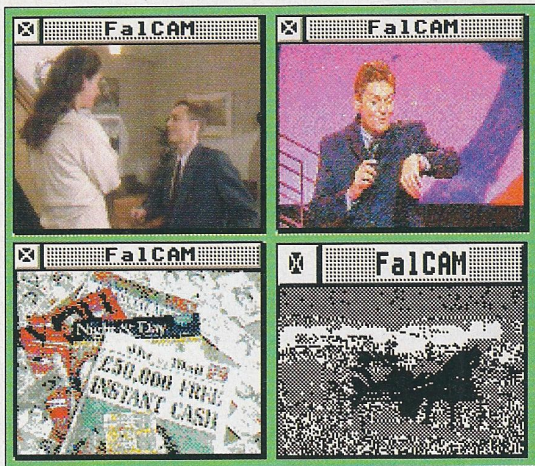


Exposé through the eyes of Exposé. The board itself has a cardboard covering to avoid short circuits.

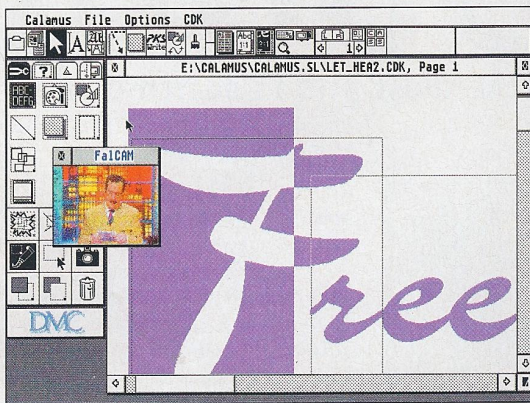


Apex displays the current picture in a small window – anything you can see, you can grab.

development which will allow you to exploit the full potential of the Exposé



FalCAM runs in all Falcon screen modes – here are the results in the standard resolutions.



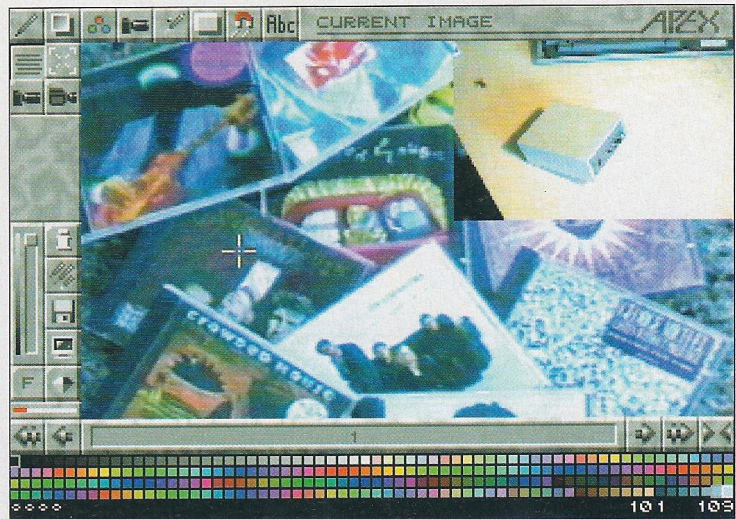
Most GEM applications will run happily with FalCAM – the more colours, the better the picture.



The shutter speed can be lengthened to extract extra detail from the camcorder – time to use a tripod!

Camera angles

Naturally, the video camera you use plays an important part in the quality of the images and animations that Apex and Exposé produce. All of the pictures on these pages were taken through a composite video connection from a mid-priced Panasonic MC-20 camcorder. As there's nothing remotely interesting within near reach of our office, most of the images on these pages were grabbed via film. S-Video and/or a direct connection would improve the quality slightly.



The RGB splitter (pictured in the live video window) allows adjustment of colour, contrast and brightness.

board, boasting still capture resolutions up to 768 by 576 given a perfectly stable image. In the meantime you can make do with a preview version of FalCAM, which simply displays the current image in a window within any GEM application – yeah, Blackadder while you work!

Only sound support is conspicuous by its absence from the future software list – considering that the Falcon already has the relevant hardware it seems a shame that you can't record movies with sound. However, it is only a matter of software, so perhaps Titan will reconsider if enough people need the facility.

Silent superiority

If you can ignore the lack of software sound support, it's hard to fault Exposé. It shares Apex's no-compromise approach, and is both easy to install and use. The price is comparable with similar boards on the PC, and as you can see the quality is outstanding. It's ideal for grabbing stills for morphing sequences or movies for Worldwide Web sites. Wouldn't it be a terrible shame if the evaluation board got lost in transit on the way back to Titan? I've got a funny feeling about this one.

Oooh AV!

It's not difficult to see that Exposé is vastly superior to ST video digitisers (and so it should be given the price differential) but how does it compare to the frame-grabbers available on other platforms?

To find out, we enlisted the service of a Macintosh Quadra 660AV. The aim was to take a still grab from each machine to show you how the two compare in terms of quality. The results are printed in this box. As you can see, there's little to choose between the images. The Macintosh offers a higher grab resolution but most of the other differences are down to adjustments in the contrast and brightness department.



Spot the difference. Here is the Exposé grab...



and here is the Mac's effort. Resolution aside, it's a close-run thing!

EXPOSÉ

Publisher: Titan Designs Ltd.

Contact: 0121 693 6669

RRP: £279 (£399 with Apex)

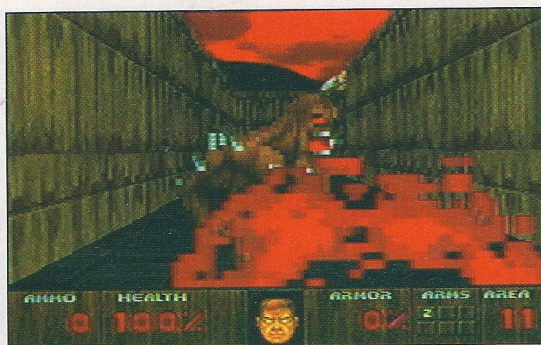
Requirements: Falcon030, 4Mb memory.

Pros: High quality frame grabbing • seamless integration with Apex

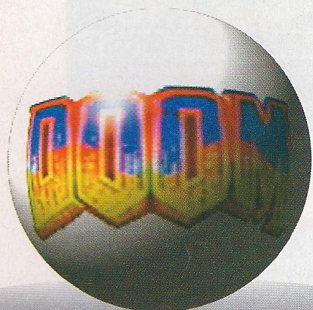
Cons: No sound

SCORE: 8

Life in the marines is no easy ride – the laundry bills are a nightmare!



Health and extra ammo are conveniently scattered throughout each level.

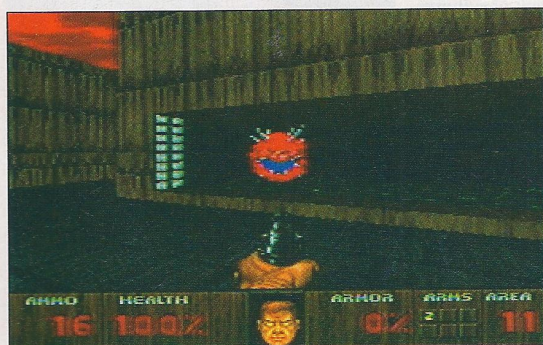


The *Doom*

Graeme Rutt enters the nethermost pits in search of eternal

I love Doom, I live Doom. It's the kind of game I can play for hours at a time. It's an ogre of a game; a gory blood-fest of stupendous proportions with a feeling of 'being there' that's second to none.

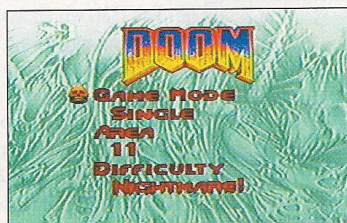
But it's more than that. Doom is a gaming phenomenon up there with Pong or Space Invaders. A fusion of wonderful gameplay, blatant aggression and intelligent, opportunist advertising has led to it becoming *the* computer game of the 90s.



Real firepower is needed to deal with these guys – the pistol barely makes a mark!

ID Software's advertising, in particular, is worthy of closer inspection. They first released Doom on to the shareware market, with hefty slabs of advertising on the Internet. It turned out to be a superb combination – people could read about it on the 'Net, download it to their PCs and be playing the shareware version within minutes.

It created a vibe, it made you believe you were part of the creation process and it made people talk about it. ID used customer feedback to



JagDoom supports Cooperative and Deathmatch play given the right cable.

improve and enhance the game and even had Doom II on a kind of public beta test.

Real 3D

But Doom is more than just good hype and easy access – the smooth moving, texture mapped 3D rooms, with real-time spot lighting effects was something really new. You can maybe argue that it was a natural progression from the 3D maze role-playing games like Dungeon Master but to me that's wrong. Doom is a souped up platform game in true 3D.

And you don't have to buy a £1,200 PC to play Doom. You can play it on a £149 Jaguar – and I can tell you that it's probably the best version available on any platform.

Jag Doom

Doom is set in a world full of zombies, imps, demons, Barons of Hell and other assorted bad lads, all viewed from first person perspective. They move, they groove, they bite your head off and – given the right prompting – they even kill one another.

There are more than 23 levels of these nasties to fight your way through

and a range of weapons to arm yourself with: from the hand-gun to the BFG-9000 (it's an acronym but you'll have to work it out for yourself). Some guns just make holes in your adversaries, others rip them to bloody shreds so be warned. Doom is not a game for impressionable parents – or their offspring.

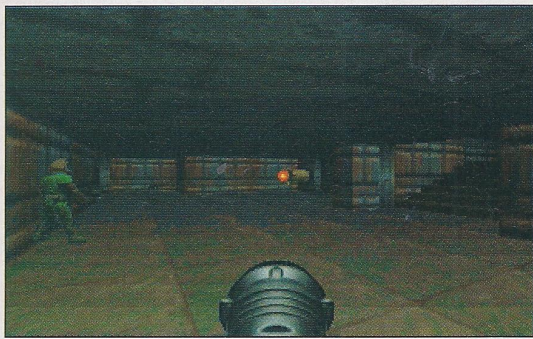
With its mature rating Doom features some fearsome scenery, with plenty of tortured folks hanging on the well-designed walls and blood splattering the diverse, dungeonesque architecture. Control is similarly realistic, with a slight hesitation on some moves, a pause when reloading guns, and so on.

Sound lets the game down; the music is, quite frankly, appalling. Thankfully it only plays during the end of level breaks, and they're very brief. The sound samples used during the game are not as smooth as they could be, but they're adequate, quite moody and add to the game.

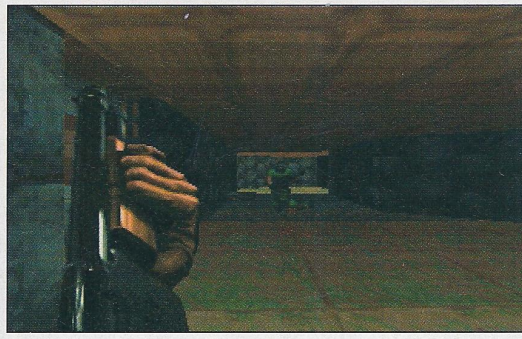
Homicidal gameplay

The excellent gameplay is a combination of realism, the homicidal subject matter and perfect balance. This is one game that's been through one hell of a play-testing phase. The amount of ammo can just cover the number of beasts, if used wisely. The levels are ordered such that just as you're becoming tired of maze walking you'll come across a nice wide open killing field. And the puzzles get progressively more difficult, leading on from one another.

Just at the point I'm despairing of ever overcoming a level I'll find that extra gun, locate that one switch or find



Hey, I want a rocket like that!



Let him have it!
Both barrels!

phenomenon

enlightenment — or maybe just blood and guts?



another passageway. Don't be fooled. Gamers aren't idiots and it's the game-play, not the hype, that's turned ID Software into a multi-million dollar company in a few short years.

The save game facility can be quite a shock to players of AvP or other games of the ilk, in that only your highest completed level is saved. You can start again on that level - but you're without the weaponry and ammunition that you'd gained previously. Originally this concerned me — but after diligent playing I've found that it just makes for a much more difficult, challenging game.

And fun is a word that I'd definitely use in any summary of Doom. This may sound strange with regard to the subject matter but blasting monsters into small pieces and solving puzzles in a 3D virtual world is really very entertaining. It's not a tense, stressful game (like Alien vs Predator) and it doesn't make me jump or spill my coffee but it is very enjoyable and extremely addictive. If you're a Jaguar owner who wants an excellent game then I recommend Doom highly.

Pixelated graphics are the last thing on your mind when a muscle-clad monster enters attack mode!

Dumb monsters not enough?

Almost all versions of Doom offer the possibility to play other human beings via some kind of network. This is another of the game's big strengths and Jaguar owners needn't miss out. You'll need two Jags, two carts, two TVs, two humans and one lead. I gathered together the requisite items and settled down for an afternoon of ultra-violence.

Two-player mode comes in two variants, in Co-Op you fight your way through the puzzles alongside your partner while in Deathmatch mode the monsters have disappeared and it's man on man to the death (and then some). It's a lot of fun and I enjoyed it a lot. Unfortunately we did seem to get a lot of network errors (at which point you are reset at the beginning of the level) but then we were using a prototype lead from Atari.

Other options?

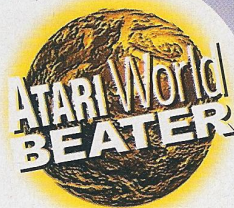
The popularity of Doom has led to more and more Doom-like games — and who are we to complain? A prequel to Doom, Wolfenstein 3D, has long been available on the Jaguar and ID Software themselves have published both Doom II and Heretic (the Doom game engine with elves, wizards and goblins) on the PC. Of course, the biggest example of a Doom copy on the Jaguar is Alien vs. Predator — probably the most atmospheric game of all time.

One of the most interesting variants is probably Descent, where you fly spaceships through spacestations and can move in a full 360 degrees in all directions. If that's ported to the Jaguar then I'll be first in the queue.

Even the Atari computer hasn't been spared the Doom phenomenon, with the excellent Substation giving 8 Mhz Atari owners the chance to blast things in smooth moving 3D.

Thanks go to:

Iain Laskey for lending me his living room, Jaguar and time. Atari for lending us the prototype net-working lead.



Substation brings head to head gaming to the ST.

DOOM SPECIAL EDITION

Publisher: Atari UK/Virtual Design RRP: £59.99 Requirements: Atari Jaguar	Pros: Enthralling • atmospheric • superb gameplay Cons: Violent in the extreme • can produce motion sickness
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SCORE: 9

Enter *the dragon!*

Are you worthy to be a master of the martial arts? Iain Laskey reckons he is.



Gussie Yang's Kitchen is one of the trickier scenarios – two opponents, no less!

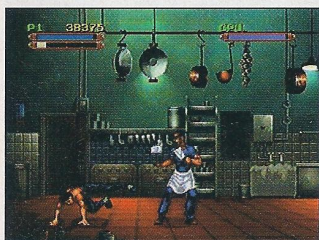
I have to lay my cards on the table. I'm no great lover of beat 'em-ups. They're one of the biggest movers of the games world though and have been for some time. With Virtua Fighter and Mortal Kombat as its rivals, how does Dragon shape up?

Dragon has several different modes of play. As a single player you can choose to follow the plot of the famous film or just take on the computer for some serious fighting. Two player options include human versus human

and two humans versus a computer controlled player. You can also choose from five difficulty levels and three speeds. It's a brave fighter who tries tough and manic mode.

You control Bruce against the various

enemy fighters. The gameplay is the usual frantic hammering of buttons and joystick bashing. There are several modes of combat controlled by your Chi rating. Each successful hit boosts your Chi and each failure reduces it. When your Chi is high enough, you get access to different sets of moves. You also have to keep an eye on your energy level as each hit you take reduces your strength. Luckily, death isn't always permanent and if you're killed, you get a chance to reprieve yourself in one last fight for the right to return again.



Good old Bruce has a huge range of moves at his disposal.

Ten locations

There are a total of ten locations, each with a progressively tougher opponent culminating in the Graveyard where you meet the Phantom who was said to be the cause of the real Bruce Lee's death. One location, the Long Beach Stadium, adds an extra twist as you only get 60 seconds to defeat your opponent.

There are so many moves in this game that it would take a serious amount of practice to even remember them all, let alone use them effectively. I counted 39 in total! Luckily, most are a combination of the A, B, C and option buttons which makes it a bit easier in the heat of the battle. Which moves are available depends on the distance between you and your enemy. The manual recommends that you practice in two player mode but with no second player until you get used to the myriad of punches, kicks and throws. A few rounds of this and I was starting to get quite proficient at head stomps. Very satisfying.

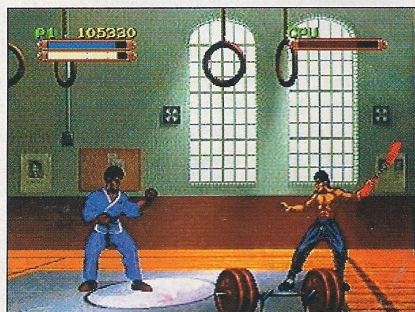
The graphics are all hand drawn which in these days of digitised fighters in games like Mortal Kombat, is a bit of a mistake. The backgrounds are nicely done but nothing to get excited about. The animation is good enough but by current standards, Dragon is a bit of a letdown in this department. The sound is more of the same with adequate noises and tunes. The high scores and game settings are saved but you can't save your current position in the story.



Extra Chi can be earned in the practice session – simply hit or kick the pads.

A nice touch is a short one page resume of Bruce Lee's life until his premature demise at 32. I wonder if they'll ever find out how he *really* died?

Dragon would have been a great game if it was released a couple of years ago. As it stands, it just can't keep up with the current crop of beat 'em-ups on other machines. It doesn't even have the extreme violence of Kasumi Ninja to give it an edge. Mortal Kombat III is on the way for the Jaguar though so hopefully we'll soon have a quality combat title to boast about.



With enough Chi in hand, you can switch to Nunchaku mode – they're pretty tricky to use though!

DRAGON - THE BRUCE LEE STORY	
Publisher: Atari Telephone: 01753 533344 RRP: £49.99	Pros: Lots of moves • Chi feature Cons: Average graphics and sound • no game save
SCORE: 5	



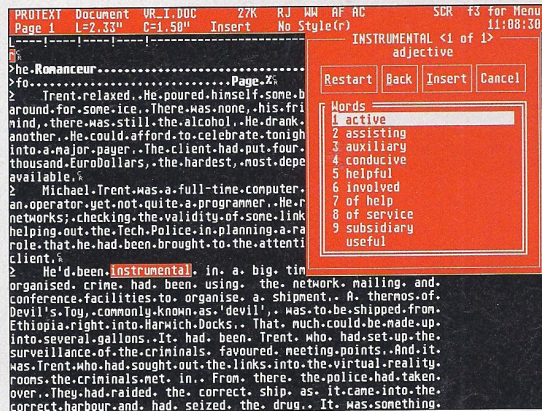
Protext 6.6

Graeme Rutt gets together with an old friend.



Editing text, the command line at the bottom of the screen is exactly that – a command line.

Way back when the earth was young and my Atari ran at a standard 5MHz I used Protext for just about everything I wrote. I gave it up when the advent of the Falcon and Papyrus helped to nullify the appalling lack of speed when using a WYSIWYG word processor. The demands for quality output and using real vector fonts in an environment that was totally



The thesaurus is really nice, why-oh-why doesn't Papyrus have a thesaurus?

GEM-standard were just too much.

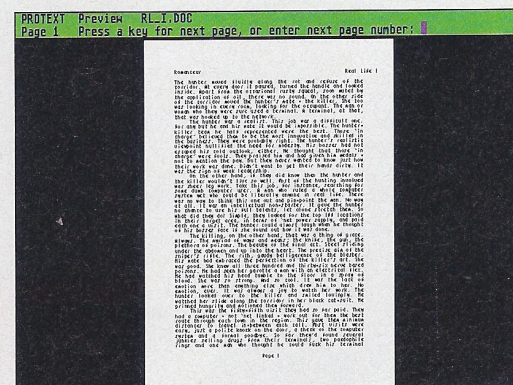
So here I am back reviewing Protext 6.6, finding out what I'm missing and – if the truth be told – reminding myself why missing it isn't too much of a loss. It's not that Protext is a bad program, far from it, the problem is that those areas Protext are best at are the least important to me – and vice versa.

By way of example, let's look at Protext's use of printer fonts – which really is second to none. Printer drivers are available for all but a minority of

rare printers and if your printer has internal fonts then Protext can use them. That's fine, that's dandy, but that's also completely useless to someone like me who wants to use NVDI or SpeedoGDOS font technology.

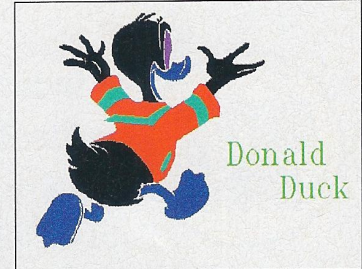
Limits

The TOS-based interface, with its limited window/menu/mouse system is also very good – enabling the sharp user to get his work done without having to use a slow GEM windowing system. This gives a phenomenal text output on the screen that makes scrolling through long documents extremely pleasant. But I rarely have to write long documents – and when I do I'll more than happily swap a little slow down for the familiarity of GEM.



This is preview mode, for checking layout before you print, unfortunately this is it – no zoom, no nothing.

You see what I mean? Maybe I'm getting meaner as I grow older but Protext is not the easiest word processing road to take. For a power user it's perfect. The in-built programming language is superb, enabling you to do anything that can be done with text. You can build complex mail-merge macros, you can process



You can include graphics in your documents – but if you want to view them you have to do so in a special viewing screen.

your text into any shape you like, you can do whatever you want – even the install program that comes with Protext is a macro that you run from the floppy.

What will I miss from Protext when I re-enter the safety of Papyrus? At the top of the list would be the brilliant spelling checker and thesaurus. Somewhere near would be the online help – saving you the bother of reaching for the more than adequate manual. And just below that would be the configurability – just about any key press can be set up to run any command or macro.

Protext has an army of avid fans, just as it has an opposing army of knockers. I'm split somewhere between the two – but don't let that put you off. If you need first class, speedy text entry with first class text manipulation wrapped up in a slick – yet non-standard – text-based interface then it's for you. On the other hand, if you want to produce the odd letter or article, with final output courtesy of NVDI on your own printer then look elsewhere.

PROTEXT 6.6			
PROTEXT	Document	VR_I.DOC	27
Page 1	L=0.00"	C=0.00"	Insert
Publisher: Compo Contact: 01487 773582 RRP: £74.95 Requirements: Atari ST, TT or Falcon, 1Mb or more		Pros: Powerful text manipulation • very fast • on-line help Cons: Non-standard interface • no NVDI/Speedo support • no WYSIWYG	
			SCORE: 7

Substation



An industrial accident has left the Mitsubishi Substation overrun by hideous aliens. Nial Grimes grabs his trusty water pistol and prepares himself for the ST's first Doom style game.



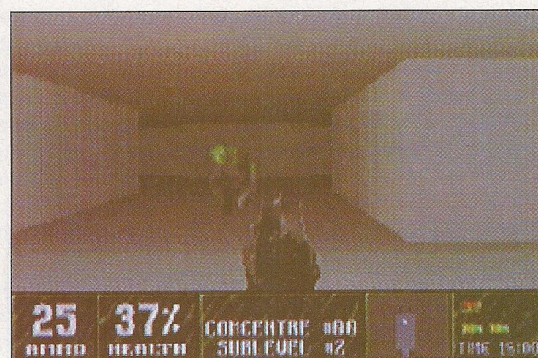
If you have trouble finding weapons they can be bought, at a very high price!

First person perspective games are the future of computer entertainment. Players no longer need to rely solely on their imagination as they view a realistic three-dimensional world through the eyes of a virtual warrior, sportsman, parking attendant or

(usually a case of splattering monsters, collecting objects, or a slight mingling of both).

Your first excursion into the vipers' nest needs to be completed with only minimal help from a dagger and pistol – anything more useful needs to be found or earned through accumulating points. As frustrating as it may sound to have to start the game with nothing more than a souped-up Swiss army knife and pea shooter, it does provide a real incentive to search out secret rooms, of which there are plenty.

Once you've moved beyond the "teething" stage, the game becomes much more exciting and you find yourself dealing with booby-traps, insane service mechanoids and aliens that have an uncanny ability to sneak up from behind. A very responsive control system – fed via the keyboard or a Jaguar Powerpad – helps to keep things under control, but even with the best will in the world, some loss of health is inevitable. It's a question of minimising the damage and finding as many health parcels as possible through exploration, which brings us to the complex itself.

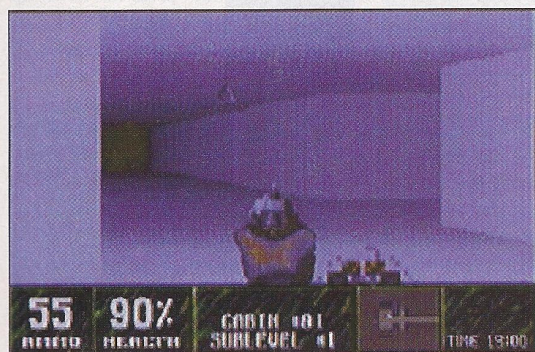


Evil aliens lie around every corner. "Err – could you direct me to the exit please?"

Grey is the colour

Much attention has been paid to the texture mapping used in the latest generation of shoot-'em-ups on the PC and to those who have seen games such as Rise of the Triad and Dark Forces, Substation's all-too-grey scenery might come as a slight disappointment. However, the all-important lighting hasn't been forgotten – monsters fade into the distance convincingly, and the whole game remains very smooth; glassy, in fact.

The problem of finding your way around such a monotone environment has been tackled in two ways. Firstly, there are landmarks – chains hang from the ceiling and pot-plants are scattered



The scenery is quite sparse, but Substation throws its shaded walls around at a terrific speed.

whatever. The success of the genre on the PC and Macintosh is well documented and now the STe is host to its very own first person perspective game, Substation. Cover me – I'm going in.

To play Substation is to take part in an underwater adventure. You assume the role of a Multi-Environmental Marine in a quest to rid the Mitsubishi underwater power station of a hostile alien invasion. With that purpose in mind, you are led through a series of missions, each with a distinct objective

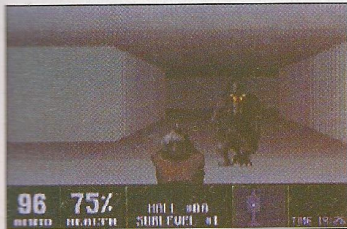


The objective of each mission is shown before you enter the complex – zap anything that moves and you'll do just fine.



sparsely around certain areas along with all manner of other objects. A good mapping systems backs up these visual aids.

Compensation for the shortfall in graphical detail arrives in the form of an excellent sound system, code-named DD-



If you think this guy looks creepy, you ought to hear what he sounds like!

player's screams of pain; all smear additional atmosphere onto an already well-presented game.

Back on dry land

Substation draws influences from quite a number of different games, and the result is a very slick experience. Although the scenery is a little drab at times, the overall mission objectives add a needed sense of purpose and serve to keep you

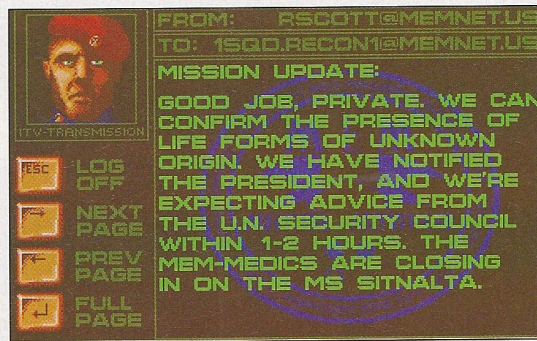
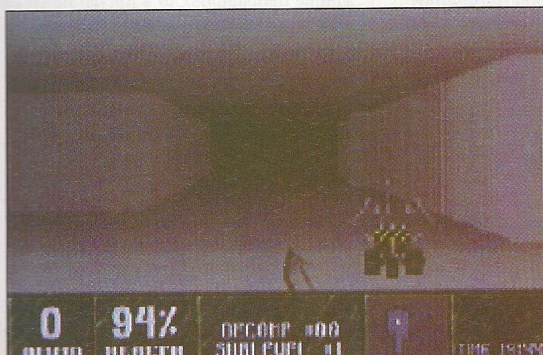


Your position can be saved in between missions, so that you don't have to repeat levels.

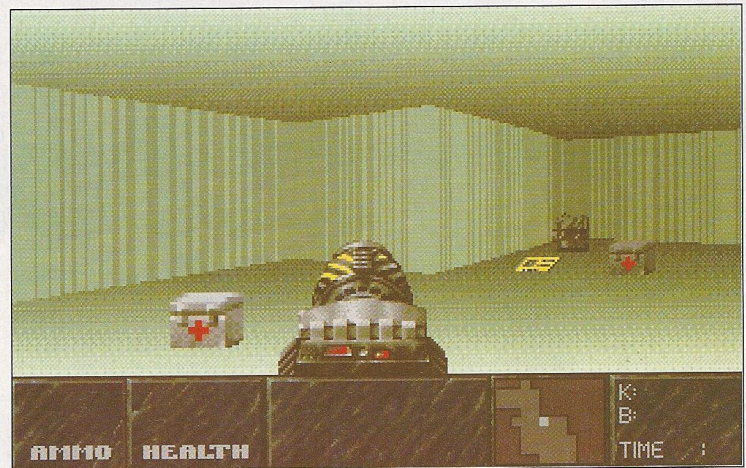
pressing through the levels – all thirty six of them. The only major complaint you can make is the copy protection system; entering a word from the manual before every

game is extremely annoying.

However, brush this concern aside and you'll find a worthy first person perspective shoot-'em-up. Substation won't live up to everyone's expectations but it remains both playable and exciting – and a real breakthrough for ST game players.



Health packs are regularly needed until you get hold of some heavy artillery.



Where on earth am I?

The map is your main ally in exploring Substation's maze of eerie grey corridors. It sits in a small panel at the foot of the screen and tracks your every move, clearly showing when a room has been thoroughly explored. By default, the map scrolls to keep up with your current position, but it can be moved in any direction to gain a better idea of the overall level layout.

A flare can also be laid if you find the exit, but have enough time, ammunition and guts to go in search of some goodies. After all, that last, secluded office could contain a security key or an extra few rounds of ammunition. Of course, the map rarely reveals hidden doors, so a degree of true exploration is still needed.



Careful use of the mapping system is essential if you want to find security keys and health packs.

MIDI mayhem!

One of the joys of first person perspective games is networking, whereby you can jump into the virtual arena with a gang of friends. Substation doesn't offer cooperative play (you and your mate on the same side) but it does boast a head-to-head mode.

Up to four machines can be linked together and players can either opt for a solo or team game in one of Substation's combat mazes. Falcons and Mega STes can be linked in to the network, and no special cabling is required – standard MIDI cables will see you through.



Two STes and a set of MIDI cables are all you need for a dose of head-to-head Substation.

The first few levels are a struggle, but extra firepower soon arrives on the scene.



Never mind the language

In part 5 of his series,
Jon Ellis considers how to keep the
command line friendly.



Error: must have exactly one filename

Press any key or mouse button to return to NeoDesk

An invalid command.

TTP programs have a reputation for unfriendliness, caused no doubt by strange PD utility programs that refuse to do anything useful, responding only with cryptic error messages that flash briefly on the screen. It doesn't have to be like this, as with a little thought and effort, your TTP programs can be made quite approachable.

The key issue is information - the user needs to know what the program does, and how to tell it to work. The best way to communicate this is probably through a help page, displayed whenever the program is invoked with an empty command line, or maybe with one containing an error.

The page should indicate the purpose of the program and then list the commands and options available and the exact format of the command line required. To assist further, it might

ZOO has two levels of help and quick-start novice commands too.

zoo 2.1 \$Date: 1991/07/14 22:39:26 \$

Usage: zoo {acDeglLPTuUvx}[aAcCdEfInMMNoOpPqul!:/.@n] archive file
("zoo h" for help, "zoo H" for extended help)

Novice usage: zoo -cmd archive[,zoo] file... where -cmd is one of these:
-add -extract -move -test -print -delete -list -update -freshen -comment
-backup -restore

Hit any key to exit

RenderST disassembler v1.49

© Jon Ellis

Modifications to 16th September 1991

Usage: render [-labcdefghijklmnopqrstuvwxyz] <sourcefile> [<outputfile>]

Opt: -l Disassemble 68010 codes -a Output suitable for reassembly -b File is boot sector image -c Calculate CRC for file -d Output offset data in decimal -e List external symbols used -f<mapfile> Read command file -g File is GEMDOS loadable -h Do hexdump of file -i<incfile> Import symbol file -j Auto-detect file type -k Uppercase control registers -l Ignore symbols in program file -m File is a GEM metafile	-n Uppercase assembler directives -o[<addr>] Disassembly output offset -p Print absolute addresses as 32bits -q<prefix> Prefix char for comments -r Suppress hint comments -s Enable smart mode -t<size> Set the tab size (decimal) -u Uppercase output -v<size> Set label field tab (decimal) -w Pause on completion of program -x File is a CPX file -y File is an ABS block -z Assume literal assembler -? Produce prototype .MAP file
--	--

Press any key to continue: █

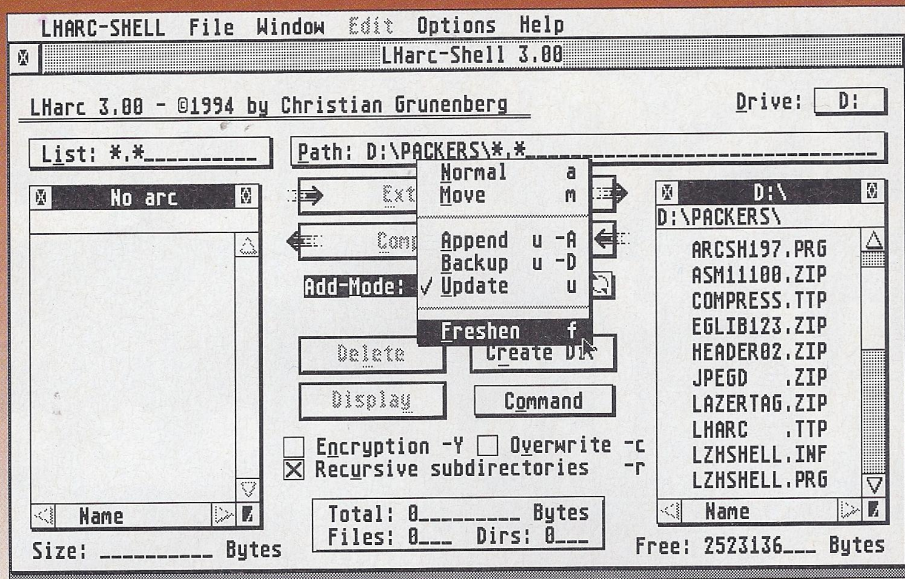
Which is the friendlier response?

also be displayed if the command line consists of an obvious plea for help: the user typing "help", "-help", "?" or "h" are good things to look for.

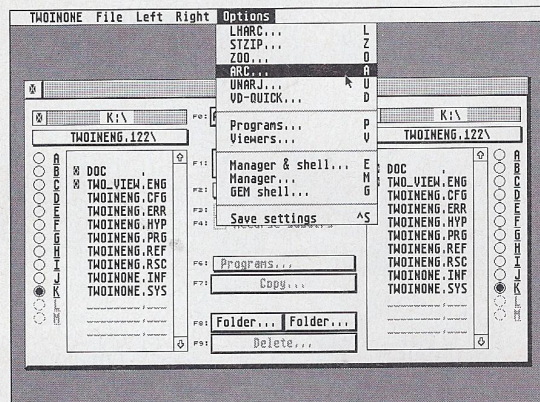
To help novice users get off to a quick start, the ZOO archiver provides a simple set of commands that cover the most commonly used operations: -extract, -list, -add and so on. Only when more subtle variations on these functions are needed does the user have to

dip into the advanced command set. This is an excellent idea for programs with complicated and flexible command line interfaces.

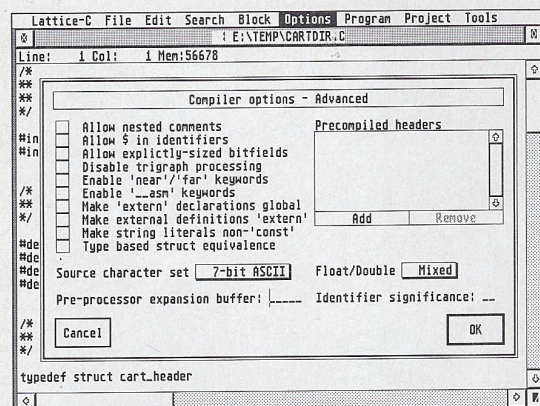
The most highly developed, friendly interfaces for TTP programs are the GEM wrappers, often called shells. These programs present the user with a full GEM interface, ranging from a simple dialogue box to a full windows and menus implementation. The user indicates which actions and options are required, and the wrapper concocts the appropriate command line and invokes the TTP program to perform the work.



Graphics wrappers provide friendly front-ends to complicated programs like archivers.



Two-in-One is a neat wrapper that can talk to lots of different archivers.



Modern C systems like Lattice C have source editors that act as wrappers for the compiler proper.

Background briefing: Getting the argument

How do you get at the command line in order to figure out what's on it? The answer to this depends on which programming language you use. Starting with the simplest, C was developed in a command line environment, and so has support built-in. Typically, the main() function is called with two arguments, usually given the names argc and argv.

Argc is an integer that indicates the number of command line arguments (pieces of text separated by spaces). Argv is an array of pointers to null-terminated strings, one for each argument. By convention, the first of these arguments is assumed to hold the name of the program being executed, so argc is always at least 1. However, TOS does not supply this information on its command line, so most ST C compilers use an empty string ("") for argv[0]. The following C code fragment shows how to print out the command line arguments:

```
int main(int argc, char *argv[])
{
    int f;

    for (f=0; f<argc; f++)
        printf("Argument %d is [%s]\n", f, argv[f]);

    return(0);
}
```

Many C systems also provide library functions that simplify the task of detecting and processing option switches. Lattice C includes two such functions: argopt() and getopt().

Accessing the command line in assembly language is also easy, though your program will have to break up the input into its individual elements itself. When a program is first started, TOS provides it with a pointer to a block of memory called the <1>-basepage<1> which contains various useful pieces of data. The pointer appears on the program's stack, above the return address. Within the basepage, the command line text appears at offset \$81, and may occupy up to 125 bytes.

The byte at offset \$80 in the basepage indicates the length of the text.

The following code fragment shows how to get at the command line:

```
start
move.l 4(sp),a0    BP pointer.
lea    $81(a0),a1  Pointer to cmd line text in a1
clr.w  d0          Clear lower word of d0.
move.b $80(a0),d0  Get length of cmd line into d0.
```

BASIC systems vary in their approach to the command line — consult your documentation for more details.

TTP dos and don'ts

Don't ignore the novice user. If there is something wrong with the command line input, display an error message explaining exactly what is wrong, not just a "Bad argument list" error! Help screens and shortcut commands are essential too.

Do consider that many users will run your program from the desktop, not from a CLI shell. This can create difficulties.

Early versions of the desktop converted the entire command line to upper text before launching a program, a real problem for programs with case-sensitive command line code.

All versions of the desktop have limited space in the dialogue box where the user types the command line (48 characters is typical). A long pathname can easily eat most of this, so keep switch names short.

The desktop redraws the screen as soon as your program exits, so if there is an error message for the user to read, add a "Press return to exit" routine before terminating.

Do think about writing a GEM wrapper program if your program uses many different switches and options on the command line. And finally, primarily for assembly language programmers:

Do remember that normal command lines are limited in length to 125 bytes. For longer command lines, an extended argument passing protocol has been developed by Atari. Fuller details of this ARGV protocol and how to implement it can be found in The Atari Compendium or in an archive available from many bulletin boards.

Do analyse your command line quickly. The command line text shares memory space in the basepage with another system structure, the DTA. The DTA is used by the GEMDOS calls Ffirst() and Fnext() and so can corrupt the command line. To be safe, either use Fsetdta() to relocate the DTA out of the basepage or finish command line processing as soon as possible.

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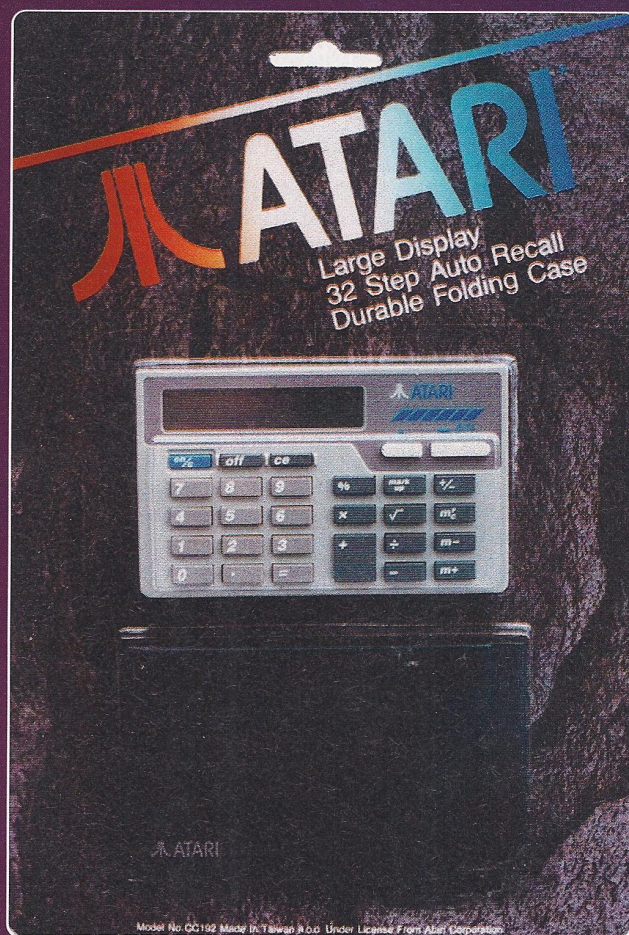
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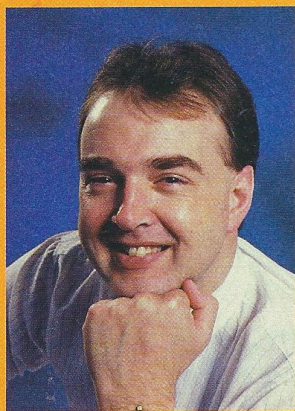
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Time for type

Most of you should now be up and running with Timeworks 2 and I hope you're enjoying it. This month we've delved a little deeper into the mysteries of type and text with articles on how to use which font in which situation and how to lay out a page professionally. There are also helping hand articles for those of you running GDOS 1.1 as supplied with the original version of Timeworks or SpeedoGDOS which works with the "special" version 2.04.

I hope you'll get a lot out of these articles because next month we'll have step-by-step tutorials on designing specific documents, from letterheads to newsletters and compliment slips, courtesy of that stalwart of the Atari DTP scene, Günter Minnerup.

Andrew Wright, Editor

Timeworks 2 tips

Timeworks 2 sets itself up automatically but that doesn't mean you're going to get the best out of it without further tweaking, particularly if you use floppy disks.

Once you've been using Timeworks for a while on floppy disk, you'll come across problems to do with memory and disk space. Timeworks creates its own slave files on disk as it goes along, especially when printing, and if you run out of disk space the program crawls to a halt.

One solution is to free up as much space on the Startup floppy disk as possible as this is the disk on which the slave files will be created. The obvious thing to do is to format a floppy disk with as many sectors and tracks as your drive will reliably read and write to. For example, 82 tracks and 10 sectors gives you an extra 100K of space. Now you can copy the files from the Startup disk across to the extended format disk and use it as your Startup disk.

The next step is to discard some of the files you won't need. If you're reasonably proficient with the program, remove all the files with an *.HLP extension. These are the online help files.

Even better, you can remove the unwanted overlays relating to the import of files you never come across: PUB_GI1.OVL is for import of IMG, PCX, SS and IFF files. PUB_GI2.OVL is for GEM, PIC and EPS files. PUB_GI3.OVL is for TIFF files. PUB_GI4.OVL is for NEO and Degas files. PUB_TI1.OVL is for importing text in ASCII, Firstword Plus and DCA/RFT format. PUB_TI2.OVL is for Microsoft Word and Works formats. PUB_TI3.OVL is for WordPerfect. PUB_TI4.OVL is for Word Star. PUB_TI5.OVL is for Word Writer. PUB_TI6.OVL is for Protexit.

You can see that the PUB_GI1.OVL and PUB_TI1.OVL files are all you need for a broad range of import options. Monochrome images can be imported in IMG format, colour ones in PCX and text in either ASCII or Firstword Plus formats.

Andrew Wright opens up with some tips on getting Timeworks 2 set up properly.

Limits

Whatever you do, you'll find there are certain limits to the program. It appears that the Timeworks/GDOS combination will only allow 8 imported images on a page and often only two of them will print. If you find images are not printing, there's probably little you can do about it except to find an alternative layout. One alternative is to use Imagecopy 4's layout feature and superimpose the images on the page after you've printed the text. It's not ideal but is anything?

Many users get confused about some aspects of the program, according to GST's helpline staff. One common query is why some fonts are marked with a dot and others not. The answer is that the ones with a dot are artificial fonts created by doubling the size of an existing font. Thus if you install an 18 point Futura, for example, you will see 36 point Futura in the menu with a dot next to it.

Another problem is that when following the manual's tutorial, you are asked to insert the Data disk to open the default style sheet. In fact it is on the Startup disk so this should be inserted instead.

Finally if you are adding your own fonts, remember the right nomenclature – *.ELQ for 180 dpi fonts, *.B36 for 360 dpi, *.HPH for 150dpi, *.B30 for 300 dpi and *.EPS for nine pin dot matrix fonts at 120 by 144 dpi. Screen fonts will be *.CGA for medium resolution and *.VGA for high resolution mono mode.



GDOS

without tears

Tired of Serif, Sans and company? You can have anything from Palatino to Cyrillic once you know how to install new fonts into Timeworks.

Gunter Minnerup guides you through the maze.

Sooner or later, the collection of typefaces bundled with Timeworks DTP is not going to be enough to meet all your requirements. It may be that you're beginning to earn some money by doing small DTP jobs -- menus, fly-

ers, price lists for local businesses - or that you're taking over a publication with an established house style and type specification.

There's no two ways around it: you are faced with the need to install additional fonts.

It would be nice if you could just drop

Kitted out

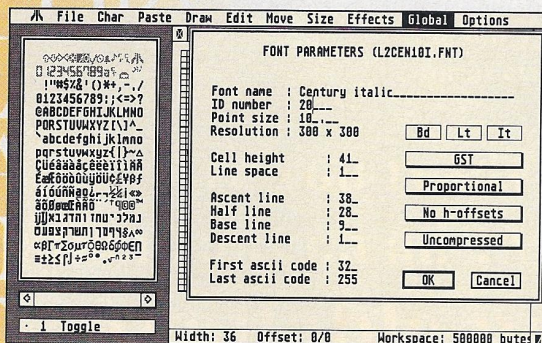
The answer to almost all of these problems is the extremely versatile and powerful Fontkit Plus, available for a mere £24.95 from the FaST Club (0115-945 5250). It will convert a wide variety of foreign fonts for use with Timeworks and other GDOS and GEM applications - yes, even Calamus fonts of which are literally hundreds both in the public domain and from commercial suppliers.

The main point to understand is that you need at least two versions of each new font, one for the screen and one for the printer, and more, of course, if you work with different screen resolutions or printers. Timeworks is slightly unusual in requiring its screen fonts to have a resolution of 80 by 80 pixels rather than the more common 72 by 72 or 90 by 90, so you'll probably need to change that first.

The resolution of the printer font is, naturally, dependent on the printer: generally 360 by 360 dpi for Bubblejets, 300 by 300 dpi for lasers and Deskjets, and anything from 120 by 144 dpi for dot matrix printers. Fontkit Plus will happily scale fonts up or down between these resolutions though some tweaking and fine tuning is often necessary to get the best output quality.

ID check

Before saving your newly converted font, pay some attention to font ID numbers and filenames. If you have a Timeworks manual, check whether your new font has been assigned a number.

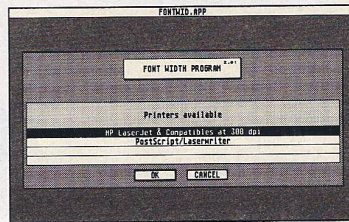
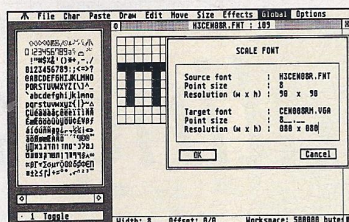


Century Schoolbook has already been assigned the ID 20 in the Timeworks manual, so we might as well use that number.

any old font file into some folder and Timeworks would happily recognise it as one of its own but things aren't quite that simple. With a little understanding of GDOS and a bit of planning and foresight, however, installing new fonts need not be too painful.

The very first question, of course, is where you are going to get your required fonts from. There are not that many good quality GDOS fonts around these days as most popular DTP programs now use different types, and even when you find what you want the file may well be in the wrong format: the wrong resolution for Timeworks or for your printer, for example.

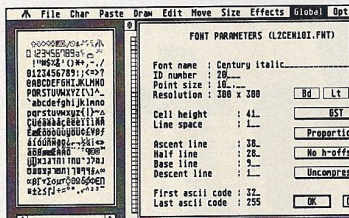
Converting from the more standard 90 by 90 dpi into Timeworks' 80 by 80 dpi resolution: the result of Fontkit's automatic scaling is quite acceptable for screen fonts.



The FONTWID.APP utility needs to be run every time a new font or printer is installed, or Timeworks won't know about the character spacing.

and enter this into Fontkit's Parameters dialogue.

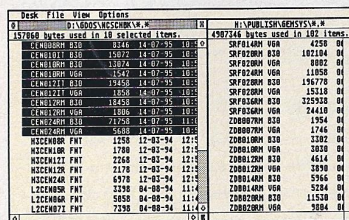
If you don't have a manual or the font has no number, give it one of your own choice above 1800 and keep a note



This filename translates into: Century, 10 points italic, at 300dpi for lasers and Deskjets.

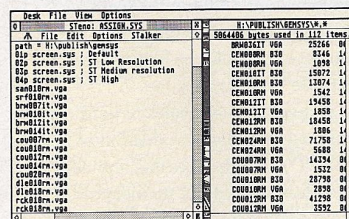
of the number to avoid duplication with other fonts which you might add later on. For the filename, stick to Timeworks' conventions and use the first three characters

for the font description (such as CEN for New Century Schoolbook), the next three for the point size (010 for a 10 pt font, for example), the next two for the typestyle (RM for roman, IT for italic and so on). As you will know if



The PUBLISH\GEMSYS\ folder is where your already installed fonts live, and the new ones need to be copied there for GDOS to find them.

you have examined your GEMSYS folder, the filename extenders are used to describe the resolution: VGA for ST high resolution screen fonts and B30 for 300dpi laser



Copying the font files to ASSGN.SYS. The VGA extender is for 80 by 80 dpi ST high screen fonts, CGA for 80 by 40 dpi ST medium.

fonts for example.

The next step is to copy your fonts into the GEMSYS folder and to edit the ASSIGN.SYS configuration file. ASSIGN.SYS is no longer the nightmare it was with earlier versions of Timeworks, when you had to take care to enter the font names in strict order

of the ID numbers - Timeworks 2 does not seem to care about this, as long as you enter each font into the correct device and resolution slot.

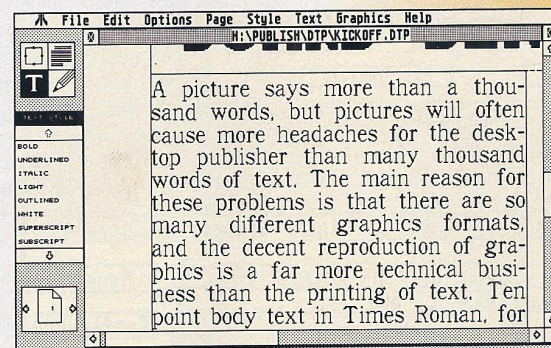
Check and double check your spelling, though, as font file names can be complicated and innocuous little typos at this stage will make you tear your hair out later when things don't work. Save your new ASSIGN.SYS and, hey presto, you're almost ready to fire up Timeworks.

Well, almost. You'll have to run the FONTWID.APP utility again, as you did when Timeworks was first installed on your system. You'd forgotten all about that, hadn't you? FONTWID examines all your fonts to build character width

tables, and needs to be run every time you install a new font, and for each new printing device as well. And don't be tempted to run FONTWID.APP before you have rebooted your Atari, as the new fonts won't be recognised unless GDOS has had a chance to reread the new ASSIGN.SYS configuration file.

If all goes well, you will now be able to start Timeworks and find your new fonts available in the Page/Size option of the Style menu. Do not worry too much if they look a bit rough and ready on screen as it's the printer fonts which decide the quality of the final output: low resolution screen fonts, especially at the smaller point sizes, can be difficult to get right because of the limited number of dots available.

It does pay, however, to spend some time in Fontkit Plus to get the printer fonts just right. Don't forget that a well-crafted GDOS font can look as good and even better than a scalable vector font as used by Calamus and PostScript output.

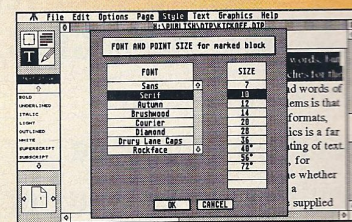


There it is - New Century Schoolbook used in a Timeworks document.

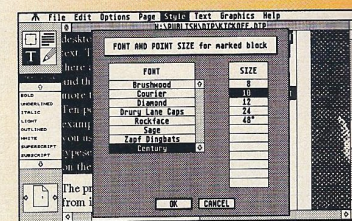
GDOS - what's that?

The Graphics Device Operating System (GDOS) is the part of GEM that controls output to such devices as the screen and printers, but was omitted from Atari's built-in version of GEM so that you have to load GDOS from disk if you want more than the built-in system font on the monitor, or other than the printer's own fonts on printed output.

The Timeworks installation routine takes care of all the basics for you, ensuring that GDOS is loaded and that its configuration files are read before the program starts. To install additional fonts, however, you need to manually edit the ASSIGN.SYS file as described in this article.



The standard built-in offering makes a good start but sooner or later you will need more choice.

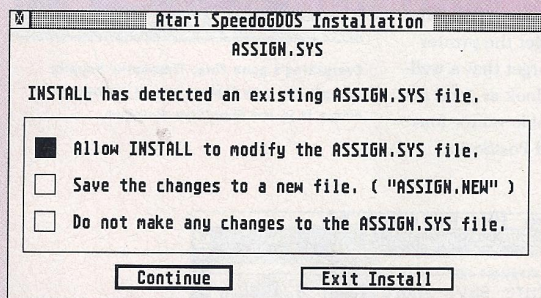


Everything's gone fine: Timeworks happily accepts the new font as one of its own and offers it in the Font/Size dialogue.

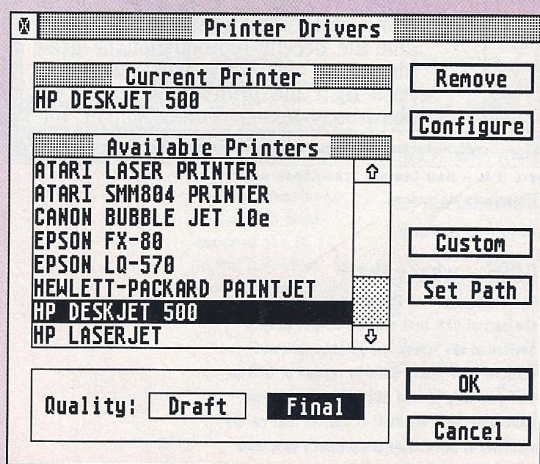
TYPOGRAPHY
SERIF
SANS SERIF
UPPERCASE
LOWERCASE
POINT
FONTSPICA
EMSEN
DECENDER
ASCENDER
WIDOW
ORPHAN
RUNNING
HEAD
BODYCOPY
CHARACTER
KERNING

Hand-crafted bitmapped GDOS fonts are very nice, but scalable vector fonts are so much more versatile and efficient. With Version 2.04 and SpeedoGDOS, Timeworks users need no longer be envious of Calamus or DA's Layout, as Günter Minnerup explains.

Scaling the vector heights



The installation routine is easy to follow, with on-screen prompts at every stage.



The Drivers utility supplied with SpeedoGDOS works as a program or as an accessory and allows you to change printers without messy fiddling with ASSIGN.SYS.

We all know that the computer industry loves acronyms: DOS, TOS, GEM, GDOS, PC, VGA, CPM, DPI – all those abbreviations that can make life so difficult for the uninitiated. One of the most commonly used in the marketing wars between software vendors, especially of word processing and desktop publishing programs, has also been one of the longest: WYSIWYG. This stands for “what you see is what you get”, claiming that the screen will give a more or less accurate preview of

the final printed output. For many years, word processing and typesetting software was anything but WYSIWYG. Monitors used simple system fonts that were quite different from the fonts built into printers, and it required a good deal of guesswork, experience and reams of paper wasted on proofs

to get the end result right.

It was only when personal computers became fast and powerful enough to run graphical user interfaces that the ugly system fonts could be done away with and replaced by on-screen representations of proper printing fonts.

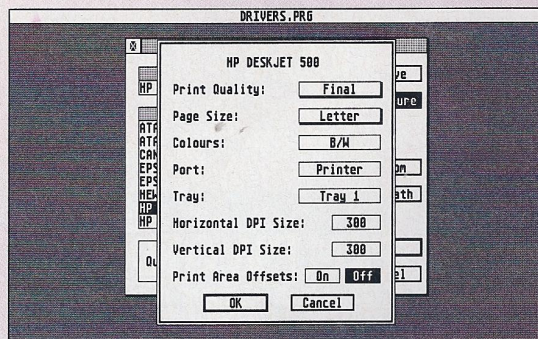
That is when the WYSIWYG concept entered marketing jargon, and desktop publishing took off as a major computer application.

Greedy

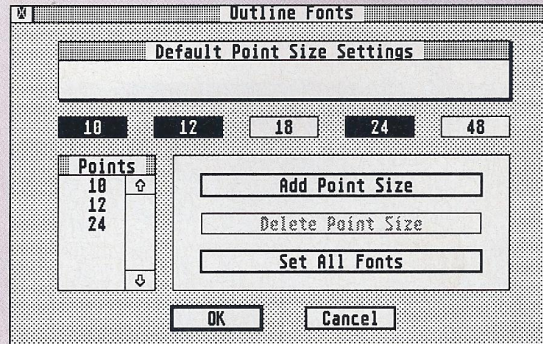
There were major practical difficulties, however. Since monitors have a much lower resolution than printing devices, two different files were required for each font: one for the screen resolution and one for the intended printer. To make even a basic set of fonts available at a reasonable range of sizes, screen and printer equivalents of, say, Times Roman and Helvetica at, for example 8, 10, 12, 18, 24 and 36 points each had to be supplied as an absolute minimum. But people use different screen resolutions and different printers, so the software packages had to cater for all these eventualities too.

Not surprisingly, sales of hard disks rocketed with the introduction of WYSIWYG wordprocessing and desktop publishing, as did the memory requirements for the computer: font files for high-resolution printers were greedy and expansive.

The professional publishing industry with its ultra-high resolution typesetters soon found a way out of this conundrum with scalable PostScript vector fonts: these were stored as outline descriptions that could be rendered at any required size by intelligent PostScript printers with their own memory and processors, thus relieving the main computer of the output processing load and reducing



The Drivers utility can also be used to configure the selected printer.



the font file requirement to the lower resolution screen equivalents.

For real flexibility and professional work, however, a lot of these screen fonts continued to be needed to cover all likely point sizes for body text and display.

Scalable vectors

The breakthrough to full, genuine WYSIWYG did not come until both printer and screen fonts were based on the same scalable vector outlines, and computers became capable of generating from these outlines any size at any resolution on the fly.

The Adobe Type Manager, based on PostScript, did this for the Mac and PC, to be followed by Microsoft's own TrueType technology, and an early contender among Atari programs was Calamus with its own font scaling technology. Calamus fonts would only work with Calamus, however, and other Atari software had to continue to make do with plain vanilla GDOS (or develop their own proprietary alternatives).

It was not until SpeedoGDOS, developed by Atari but marketed by third party companies, came along that Atari users got access to scalable font technology that would work with all (or

Timeworks does not need this, but as SpeedoGDOS is not application-specific you need a means of telling less capable programs about the default point sizes to be offered.

at least most) GDOS software.

The original release version of SpeedoGDOS, Version 4, uses the Bitstream font format which is well-established in the PC market, and a subsequent Version 5 would also work with TrueType and PostScript fonts. Once installed, SpeedoGDOS generates screen and printer fonts from the same vector outlines at any desired point size, thus ensuring that the printed output matches precisely the appearance of your page on the monitor.

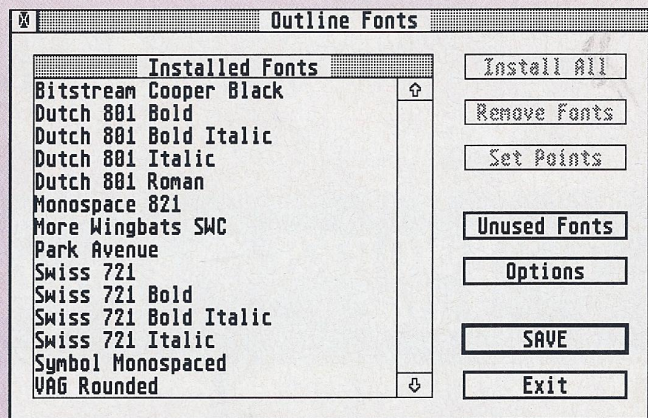
Installation

Unfortunately for Timeworks DTP users, however, the program choked on Speedo fonts and it was not until the release of Timeworks 2.04 that this breakthrough became compatible with many Atari owners' favourite desktop publisher.

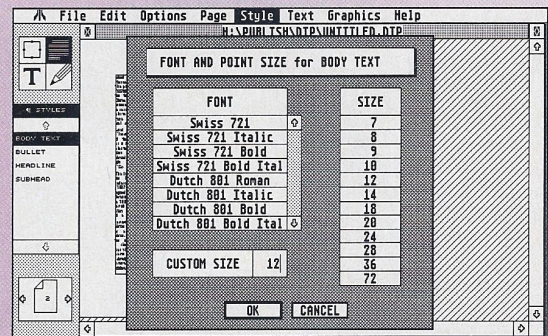
It still doesn't work with SpeedoGDOS 5 but the wide availability of Bitstream Speedo makes this drawback fairly easy to live with. Most importantly, perhaps, there is no need to throw away your collection of bitmapped fonts in the old GDOS

format as the Timeworks/Speedo combo will happily continue to use these alongside the new vector fonts – after all, a really good, carefully designed bitmap font will easily beat a vector font for quality.

Timeworks 2.04 will not work without the presence of SpeedoGDOS,



The desk accessory (or program, depending on available RAM) called Outline simplifies the installation or de-installation of fonts.



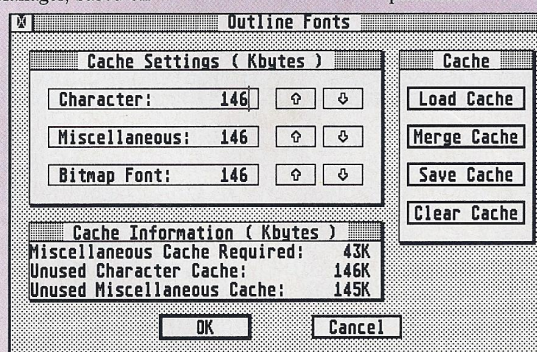
At last: scalable vector fonts in Timeworks' Font and Point Size dialogue.

so the latter will have to be installed first. The installation program provided makes this a breeze: all you do is follow the on-screen prompts and specify which printers you intend to use.

The next step is then to copy the upgraded Timeworks 2.04 files into your PUBLISH folder to overwrite the originals and reboot your ST to launch SpeedoGDOS – any older versions of GDOS must be deleted or disabled with a boot manager such as X-Boot.

This being Timeworks, don't forget to run FONTWID.APP before starting the main program: just ignore the "FSMGDOS not supported" error message which may appear on completion of this.

You are now ready to reap the rewards. The Font and Size dialogue now offers 14 new, very high-quality scalable fonts, at just about any point size required, for the screen as well as any of the many printers supported. With SpeedoGDOS, Timeworks finally enters the modern era of true WYSIWYG desktop publishing.



The Outline utility also allows fine tuning of the different caches. The new settings won't come into effect until after a reset, though.

ATARI World

in conjunction with COMPO and HiSoft brings you

**TIMEWORKS
2.04**

Speedo GDOS

**TIMEWORKS 2
MANUALS**

**SCALEABLE FONTS
WITHIN TIMEWORKS**

THE FONT SOLUTION

**AN AID TO MASTERING
TIMEWORKS**

As soon as you use this months Atari World Readers Disks you will discover the amazing **Timeworks Publisher**. A great program except for one thing - its limited built in fonts.

The solution? **SPEEDO GDOS** and **Timeworks 2.04** exclusive to Atari World! Speedo GDOS was produced by Atari as the solution to the lack of fonts on the ST, TT and FALCON 030. Timeworks 2.04 is a previously unreleased version of Timeworks Publisher that supports SPEEDO GDOS and lets you specify font sizes from within the Timeworks program itself.

- ◆ Comes complete with 14 Bitstream Speedo fonts, 8 different styles some in different weights.
- ◆ Comprehensive range of printer drivers including all standard 9 pin dot matrix, 24 pin dot matrix, inkjet, laser and Atari SLM.
- ◆ Requires a minimum of 2MB of RAM and a hard disk.
- ◆ Timeworks 2.04 is fully WYSIWYG (What you see is what you get) on screen when using Speedo GDOS 4.0
- ◆ Easy to install - the easy to follow instructions in the install program and you will be up and running in minutes.

Timeworks 2 manual

GST, the producers of Timeworks Publisher 2, were always renowned for the quality of their manuals. The Timeworks 2 manual is a model of clarity and will help any user get the best from this great program. We have the original manual available for just £14.99.

The full manual for just £14.99

Get Speedo GDOS and Timeworks 2.04 for just £49.99. Save £50 when you also buy two font packs.

About fonts

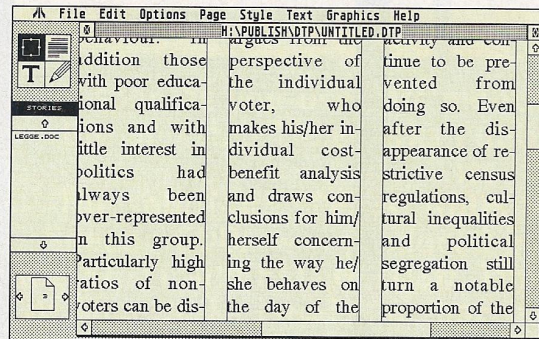
The full version of Timeworks on the Atari World readers disks uses GDOS, the forerunner of Speedo GDOS. This means the fonts it uses are all bit map fonts, ie the font contains a collection of dots that go to make up each character. The fonts are therefore all fixed in size. For most DTP applications this is not very satisfactory. Whilst you can change the size of a bit map font using a font editor, the normal results mean a drop in

quality. Having created a new bit map font it can also be tricky to get Timeworks to recognise it. Speedo GDOS solves all this by using Speedo outline fonts. An outline font is a font that is stored as a collection of mathematical type expressions, ie lines, curves etc, not as a collection of dots. Speedo GDOS takes an outline font and generates a bit map font at any size you specify - subject of course to you having enough memory in your computer. Some outline fonts have hint information in them. Hint information is used to improve the quality of

fonts at smaller point sizes. This means that when you use a good quality original font you will get better quality at small point sizes than you would using an un-hinted font. The Speedo outline font format supported by Speedo GDOS has hints. However other outline font formats common on the ST such as Calamus fonts and Calligrapher fonts do not have hints. If you are using either of these programs you will see an improvement in output quality by switching to Timeworks 2.04 and Speedo GDOS.

Spaced out

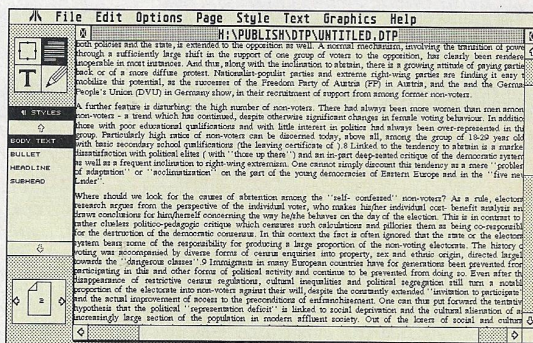
Fine-tuning your Timeworks typography is not difficult if some basic principles are understood. Günter Minnerup shortens the learning curve.



An extreme example of poor setting: too many columns, the lines are too short, the justification introduces ugly white gaps between words and even letters. Yuk.

Here the lines are far too long for the size of the font, and too close together. The eye has trouble following a line without jumping to the next one.

Not all DTP projects involve the glamour and excitement of graphical illustrations. Many newsletters, manuals and, of course,



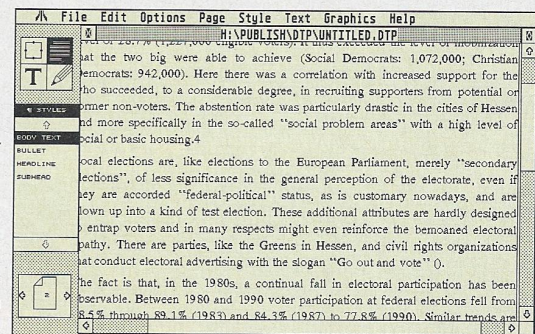
books contain virtually no pictures at all. Bold graphics may be the jam of desktop publishing, but text is definitely the daily bread and butter. Yet in many ways good text setting is the most difficult of all desktop publishing skills to master properly.

It may be stating the obvious but setting text is all about readability. The trouble with readability, however, is that different pairs of eyes have different degrees of tolerance, and the established rules of good typography – the result of many years of training and experience for the professional can be far from obvious to the unskilled operator.

A page may look OK to you when you scan it in isolation, but will many dozens of the same page give someone

else a headache, or cause him to put down your publication with tired eyes? In the days of the typewriter, authors and editors did not have to worry too much about this, certainly not before they held the proofs in their hands. But the power of desktop computer publishing brings increased responsibility with it as you can no longer delegate typographical decisions down the line, so you might as well learn the rules before you tackle your first text intensive document.

is not too difficult to achieve but justification inserts extra white space between words – or, worse, between characters – to make the right margin line up and this can cause very



Increasing the point size and the Leading gives a much-improved appearance.

Proportions

As with most things in DTP and design, the secret of success lies in the correct proportions. There are no hard and fast rules, for example, as to how large or small a body text font should be: that depends on other

variables such as line length, line spacing and the typeface used. What's acceptable in one context may well look horrid in another. The starting point for deciding on all these aspects must be the basic units of text: the word, the line and the page – and in that order.

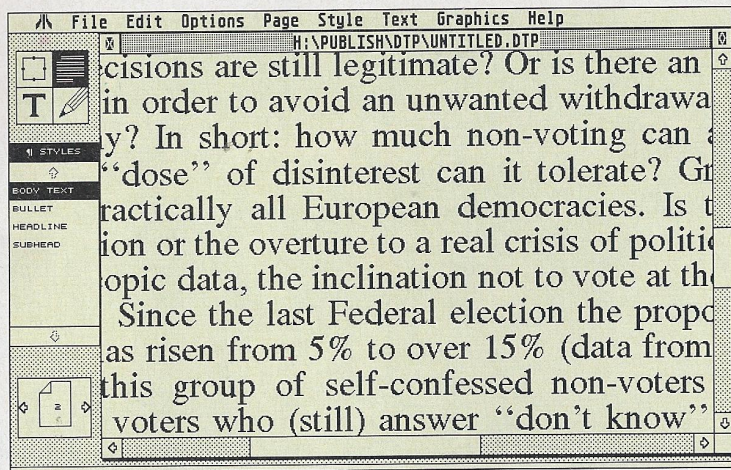
The eye distinguishes words from each other by recognising the different amounts of space between letters and words. If the difference between the two is not pronounced enough, it will have difficulties identifying the words and soon get tired. The same applies if the space between words becomes too large or too irregular. A well-set line will therefore have evenly spaced-out words, not too far apart and not too close together. With unjustified text this

unsightly gaps, especially in short lines with long words and no hyphenation.

Line length and leading

For justified text, therefore, the lines should be reasonably long to avoid this problem. On the other hand, however, they should not be too long as a pair of eyes has only a limited horizontal range. An average of ten or twelve words per line is normally regarded as ideal for body text. To guide the eyes smoothly along each line, the amount of space separating each line from the next is also crucial: too much space and the lines get detached from each other, too little and they become hard to keep apart.

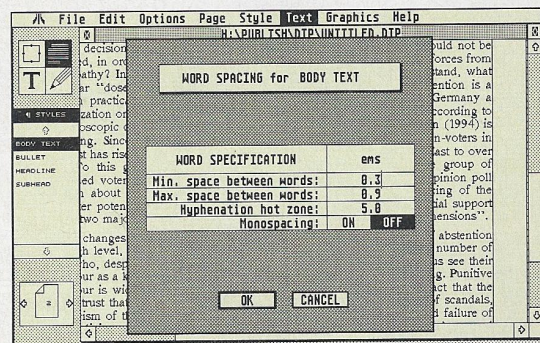
The secret of good text setting therefore lies in the right triangular relationship between type size, line length and line spacing. A large body text font will require longer lines and more line spacing – or leading – than a smaller one. The longer each line, the more leading is needed for good legibility. The term "leading", incidentally, is derived from the ancient practice of inserting thin slivers of lead for extra spacing between the lines and is therefore pronounced as "ledging" rather than "leeding".



Ems and ens

If your text still looks uneven, with unsightly "rivers" of white space cascading through the paragraphs, the judicious use of Timeworks' hyphenation and word spacing controls

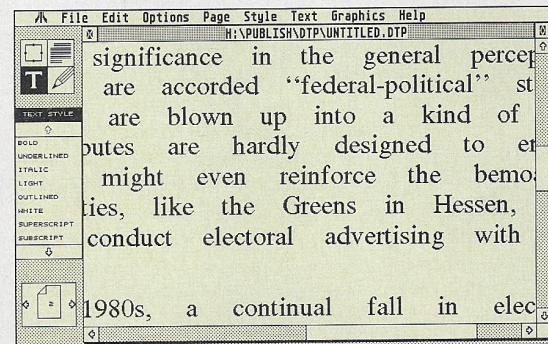
A large body type font of 14 or 15 points can be necessary on occasion, but requires more generous leading than it is given here.



may sort things out.

Justified text almost always looks better with automatic hyphenation enabled, and for unjustified text the hyphenation "hot zone" setting in the Paragraph Style, Word Spacing dialogue allows you to determine how "ragged" the right margin will look.

"Ems" are a relative measure based on the width of the letter "m" in a given font.



The minimum and maximum space between words settings are best left alone unless you really know what you are doing; then again, there's no harm in experimenting to study their effects. The word spacing and hyphenation settings are in "ems", a traditional typographer's measure

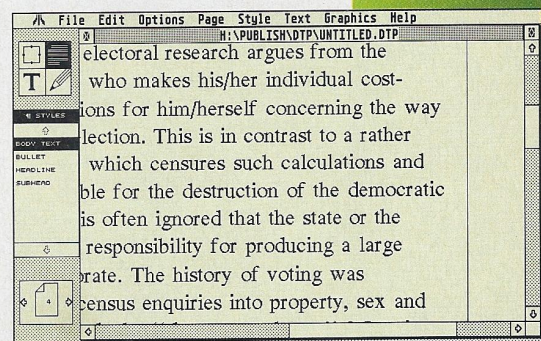
Excessive word spacing generates "loose" setting which breaks the flow of sentences.

relative to the font currently used. An "em" is the width of the current font's "m" character, so the precise value of 3.5 ems will vary. No prizes for guessing what an "en" space is based on.

Whatever else you do, set Letter Spacing to "off" in the Paragraph Options dialogue. If enabled, it will add additional space between characters

within words to help justify right margins, rather than just add spaces

between words. Call me a traditionalist, but I find that totally unacceptable even if the Americans and some British newspapers do it. If you can't get decent-looking, justified text columns by varying the wordspacing only, the answer must be to drop justification altogether and set ragged-right text.

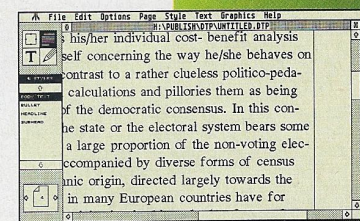


A large "hot zone" setting produces a rather ragged right margin.

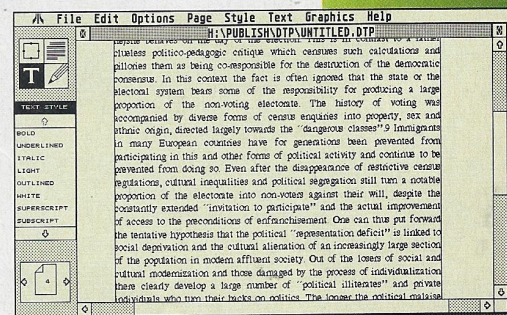
Monochrome colour?

When experimenting with all these different settings, you will soon discover the benefits of Timeworks Publisher's text styles. Any alterations you make to, for example, the word spacing of a style are immediately reflected throughout all paragraphs "tagged" with that style so it is easy to ring the changes and see the effects. A good way of building up your understanding is to have two columns or two pages side by side, set in two different body text styles. You can then fiddle around with both and study the contrasts in direct visual comparison.

The differences between two such columns and pages are often very pronounced, especially in full page view, when various combinations produce what appear to be distinct textures and shades of grey. This phenomenon is referred to in the trade as "type colour" and you should try to match the effect to the purpose of your publication, and then achieve consistency over all the pages.



A small "hot zone", by contrast, introduces more hyphenation and a more even rag.



An example of good text setting: about 12 words per line, an even "texture" and good line spacing of 15 points for a 12 point font.

Andrew Wright
shows you how the
subtle art of
typography can
enhance your documents.



The Type

is right

ents.



This simple newsletter design has a slab serif masthead, sans serif headline and serif body text.

Typography is the study of type and for several hundred years it was the sole basis of good document design. Until the age of desktop publishing, that is. In the last few years, the widespread availability of DTP programs has meant that the art of choosing and using the right typeface has been buried underneath an avalanche of special effects.

That's not to say that effects like drop caps and rotated text aren't useful. Good designers use every tool at their disposal but it's important to understand how to choose the right fonts for your document if you're going to succeed in getting your message across.

So what do we mean by fonts and typefaces? Strictly speaking, a typeface is a distinct design while a font is a set of characters in a given typeface at a particular point size and style. Thus Timeworks' *Serif* is a typeface and *Serif 12 point italic* is a font although the terms have generally become interchangeable with the arrival of scalable type handlers like SpeedoGDOS.

Several typefaces, all variations of

the same design, such as Times Italic, Times Bold and Times Bold Italic, make a complete type family. Most type families are supplied in these four styles but others like Univers have as many as 36 different variations to make up the complete family, from Extra Light Condensed to Ultra Bold Expanded.

Type class

Typefaces can be classified in several different ways. Forget the expert classifications that tend to be based largely on historical origin as well as on style. In basic “user-friendly” terms, there are four main groups:

Serif

Serif typefaces are undoubtedly the most widely used of all. They take their name from the small “serifs” or tails present on the stemmed characters and this tends to make them easier to read, especially if there is a lot of text.

The most obvious example is Timesworks' own Serif (similar to Times Roman) or Dutch 801, the SpeedoGDOS version, but such a broad classification covers a wide range of typefaces. These range from older serif typefaces like Garamond and Caslon, designed hundreds of years ago but still popular, to typefaces like Bodoni with very fine, "hairline" serifs that look

bright and modern. There are also so-called slab serif faces like Rockwell (Timeworks' Rockface) that are very geometrical in appearance.

Sans serif

Sans serif typefaces, not surprisingly, have no serifs on the ends of the character stems – Timeworks' Sans Serif for example. Other popular alternatives include Gill Sans and Futura.

These typefaces are mainly used for headlines and bold displays on posters and leaflets but they can often be used for small areas of body text, particularly in technical documents, and italicised for annotating diagrams and captions. Sans serif typefaces are not as readable as traditional body text typefaces but at larger point sizes they become much more effective at grabbing attention.

The group also includes “modified sans serif” typefaces like Timeworks’ Autumn or Optima which have no serifs as such but the stems tend to widen at the ends giving the impression of miniature serifs. These can be used more easily as body text.

Script

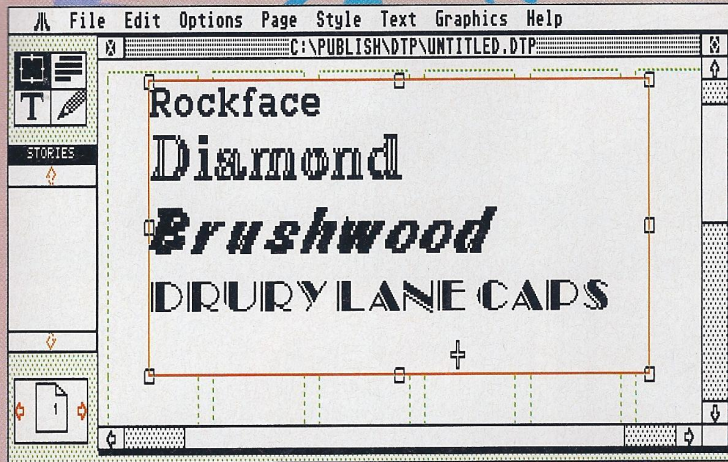
It's hard to imagine a good use for script typefaces when they are viewed on their own. Start to experiment with them, however, and they open up all

Brushwood
ABCDEFGFg
abcdedf g

Brushwood is a script font that can be used for display.

Castleton
Roman

The FaST Club's Fontpac series includes Castleton Roman – an ornate serif font that will work with Timeworks 2.

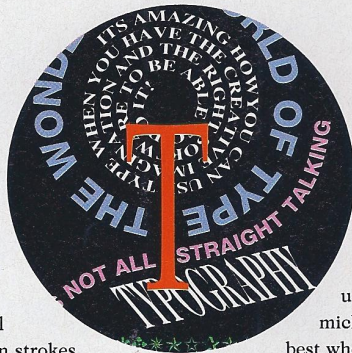


Timeworks 2 display fonts.

sorts of design possibilities.

Connecting script typefaces strongly resemble calligraphic handwriting while the non-connecting varieties include informal scripts, brush and pen strokes and some that look as though they belong in the Middle Ages, like Old English.

You should resist the temptation to use script faces for anything more than short passages as they are hard to read. Documents such as menus, invitations and certificates, for which script typefaces are ideal, should have the lines of text well spaced so that they are legible. Large point sizes are also a good idea, again to improve legibility. Sage, included in Timeworks 2, is one of the more



legible examples and can be used more widely.

Display type

Display typefaces are generally bold, unusual, even gimmicky, designs that work best when used for single words or phrases. There are more of them around than any other because they are often created for particular purposes.

VAG Rounded, for example, was created for Volkswagen-Audi-Golf. Display fonts are useful for adverts, leaflets and logos but they have to be chosen with care – examples included with Timeworks 2 include Drury Lane Caps and Diamond. Timeworks' Brushwood has characteristics of both the script and display categories.

Sans serif
(Futura)

A sans serif typeface.

Slab serif

A slab serif typeface.

Getting the message

Choosing the right typeface for a particular job is vital but most people get very little advice beyond the basic "serif for body text, sans serif for the headlines" approach. True, research has shown that serif typefaces are far more readable than sans serif ones, partly because of the classical shape of the letters themselves and partly because of the small serifs which enable us to identify letters quickly.

Using the classification we've presented here, you shouldn't have much trouble deciding which kind of typeface fits where on the page. But is that all there is to it? Not at all. The real secret in choosing a typeface is to make it reinforce your written message.

For businesses, there are also advantages in sticking to one or two "corporate" typefaces in both internal and external documents. That way you give customers the right corporate image and you make it easier for staff to create new documents.

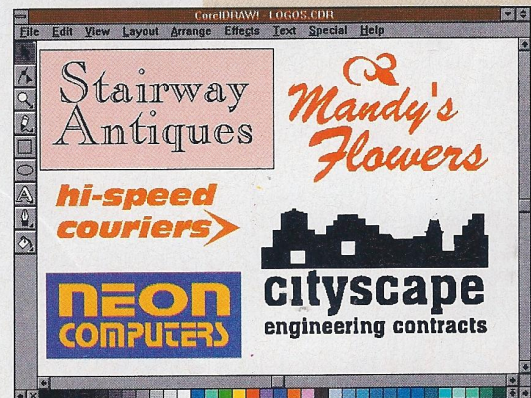
Engineering and construction based businesses need to have solid, dependable looking logos and bold, thick fonts like Rockface or Aachen are a good choice.

For an antique shop or old world restaurant, you could try something like Diamond or Caslon OpenFace – the classical, engraved look conveys a real sense of history. High tech businesses need to go to the other extreme – a simple, ultra modern font will look pretty good.

For a courier or delivery service we need a sense of speed – here a plain, no nonsense font such as a sans serif font with a distinct forward (italic) slant could provide the answer.



The typefaces in this example fail to put the message across.



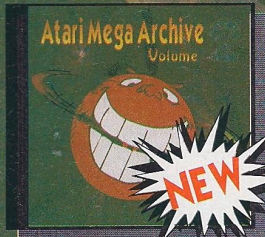
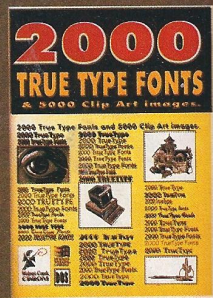
Here the typefaces are matched to the businesses concerned – a flowery script face, a solidly built "engineering" face, a slanted speedy looking face, a trendy, modern face and an old style face.

ATARI
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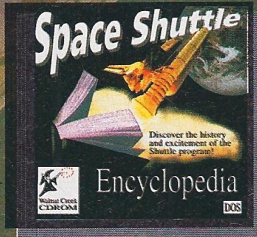
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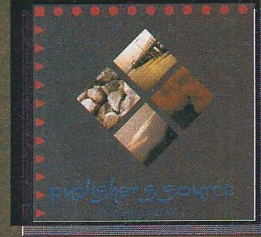
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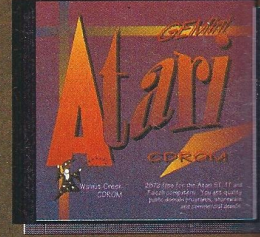
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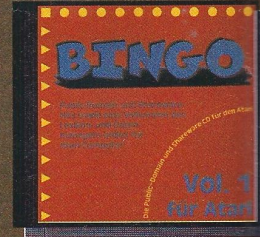
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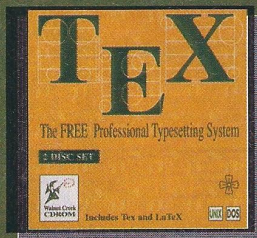
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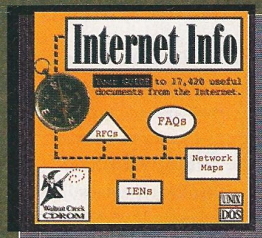
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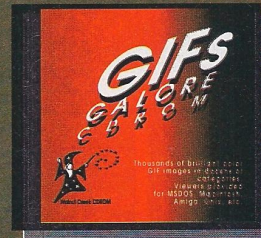
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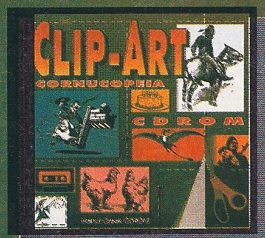
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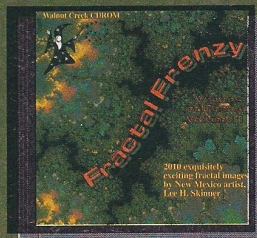
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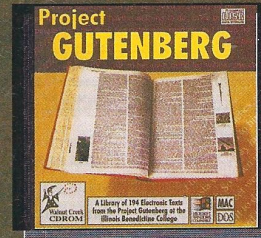
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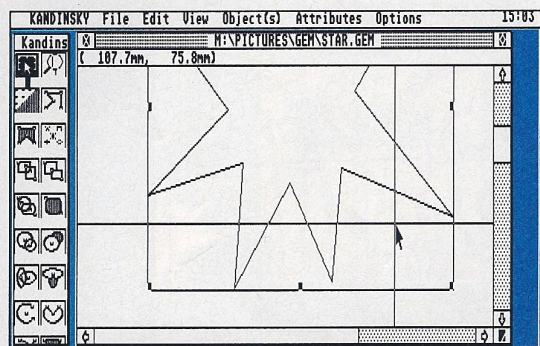
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The Language Barrier

Atari World presents more exclusive excerpts from Mark Baines' definitive A to Z guide to the Atari.



Metafile. Objects can be drawn easily and quickly with a metafile editor or drawing program such as Kandinsky.

This month we present the fourth of six edited excerpts from Mark Baines' Atari A to Z, the essential guide to everything to do with Atari. Note the words edited excerpts — the full text runs to 128,000 words and 101 tables and it is aimed as much at the beginner as it is the experienced Atari user. It really is a case of everything you wanted to know about your Atari but were afraid to ask!

If you want the complete guide, you can order Mark's book direct from Linnhe Computing, Shore Street, Inverby Tain, Ross-shire IV20 1SF or telephone (01862) 871624. You can also e-mail Mark at msbaines@cix.com-pulink.co.uk. Remember, if it isn't in the Atari A to Z, it probably doesn't exist!

Menu bar

The primary means of controlling a GEM application consisting of a horizontal list on the screen top row from which vertical lists of items can be pulled for selection. The first menu item on the left should be the program's name with access to accessories and under MultiTOS this also provides access to the other active programs.

Metafile

A file with a *.GEM file name extender containing vector graphics data

produced by an object-oriented drawing program, such as Easydraw. Such files can be scaled to any size and printed at any resolution without losing detail.

MFP 68901

Multi-Function Peripheral 68901. A chip that controls the serial port on the ST and STe, and some of the serial ports on the Mega STE and TT. It also detects whether a monochrome monitor is connected and if the printer is busy.

MIDI

Musical Instrument Digital Interface. A high-speed multi-channel, serial connection with up to sixteen devices, usually musical instruments or controllers. The presence of MIDI IN and MIDI OUT ports established the ST in the music industry.

MiNT

MiNT Is Not TOS. A freeware operating system written by Canadian Eric Smith providing some multitasking capabilities to TOS. It allows one GEM program and several TOS programs to multitask and uses many techniques and utilities taken from the UNIX operating system. In 1991 Atari obtained a licence from Eric Smith to make it the basis for MultiTOS so that MiNT now stands for "MiNT Is Now TOS".

MINT.CNF

A text configuration file for MultiTOS, loaded at boot-up and used to set some MiNT variables and to execute commands.

MMU

Memory Management Unit. Atari custom chip controlling the processor's interaction with the memory and video chips and DMA. On the ST, although the processor can handle 16Mb of memory, the design of the MMU restricts this to a maximum of 4Mb.

Modulator

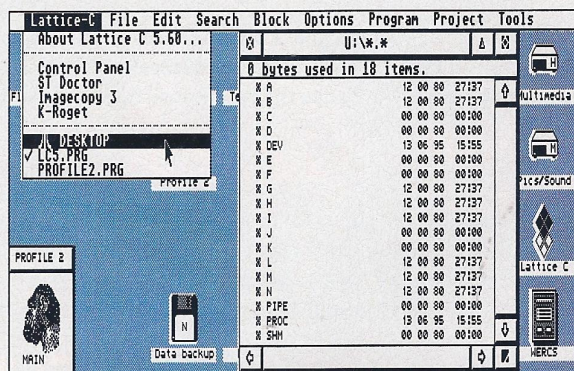
A device that converts the computer's RGB colour signals into an RF (Radio Frequency) television signal.

Mouse

A device with one to three buttons used for controlling a special screen cursor (normally an arrow pointer) to manipulate graphic items in a GUI (graphical user interface) environment.

Move bar

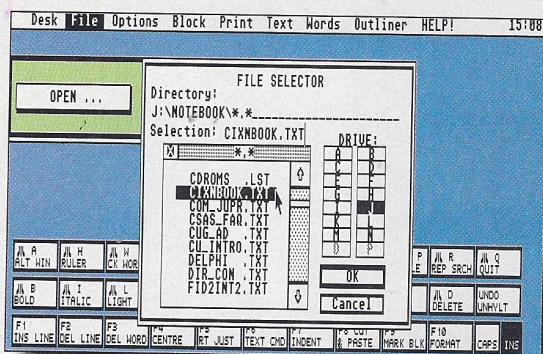
The shaded top border of a GEM window that allows the window to be moved to another position.



MultiTOS, MiNT, NewDesk. A MultiTOS NewDesk desktop showing Lattice C's menu bar, MiNT's unified drive U: and an iconified program. The list in this menu shows all the currently loaded programs.

Multitasking

The operation of carrying out more than one process at a time.



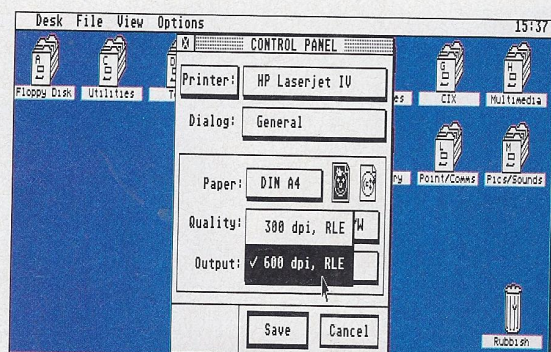
Pathname. A file selector relies on path names to find the file you wish to load.

MultiTOS

The multitasking TOS based on MiNT and running GEM and TOS programs under the Newdesk desktop or other front end program.

Newdesk

The GEM desktop introduced with TOS 2.05 and TOS 3.05, utilising some of the ideas found in the NeoDesk desktop replacement including the placing of icons on the Desktop.



Pop-up menu. CPX modules commonly use pop-up menus where a selection of items can be presented in a list.

NEWDESK.INF

A file that holds the customised desktop data for versions of TOS from 2.0x onwards. It is created by selecting the Save Desktop menu option and read at boot-up from the root directory. It performs the same function as the older DESKTOP.INF file.

NVRAM

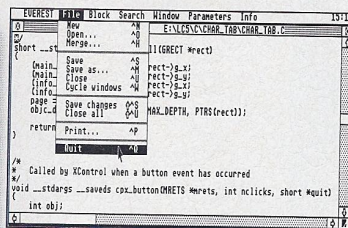
Non-volatile random access memory. Memory that has its contents maintained by a small battery installed on the circuit board which takes over when the mains power is switched off. The real-time clock chip maintains its value on the Mega ST, TT and Falcon with NVRAM.

Object

A screen graphic shape, such as icons, menus, boxes in a graphical user interface or GUI.

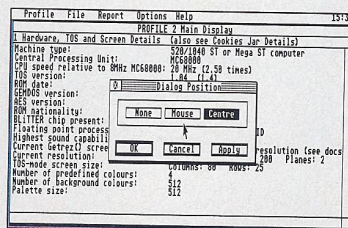
Parallel port

A port capable of transmitting eight bits of data simultaneously and often used for connection to a printer.



Partition

Large hard disks are often divided up into smaller, more manageable areas and given separate drive letters. These 'virtual disks' are called partitions.



Radio button. Where only one condition can be active and therefore only one selection must be made radio buttons are ideal.

Path name

A list of items used to locate files on a disk. It consists of a disk identifier and a string of folders separated by backslashes and may contain a file name, such as

D:\PROTEXT\DOCS\LETTER.TXT which points to the file named LETTER.TXT in the DOCS subdirectory within the PROTEXT directory on the disk drive D.

Pop-up menu

A menu that isn't connected to the main menu at the top of the screen.

Port

A place by which data enters and/or leaves a device and typically an electrical connector.

O

A ten key pad controller for the Jaguar games console.

PRG

A GEM application file name extender. A program file.

Printer port

The parallel port – the usual port to connect to a printer and controlled by the YM-2149 sound chip.

PRX

The file name extender for an inactive GEM program file. Such files are found in the AUTO folder where the presence of the .PRX extender makes the program unrecognizable to TOS and

Quick keys. Some attempts have been made to standardise the keys used for common menu items, such as Save and Quit.

thus not loaded at boot-up.

Quick keys

A term given to the keyboard commands of functions found in menus.

Radio button

One of a group of buttons that de-selects the others when selected so that only one may be active at a time.

RAM

Random access memory.

The memory chips that a computer uses to run programs and process data in. The contents of this memory is lost when you switch the computer off.

RAM disk

A section of memory set up to behave as a very fast disk drive.

Real-time clock

A chip which provides the time and date and is kept working by batteries when the computer is switched off.

Resolution

The number of dots making up a bitmap image on screen or paper. This term is also frequently used to describe the overall size of a screen in pixels.

Resource file

A file with the extender.RSC containing the graphic objects, such as the menus, dialogue boxes, icons, images and alert boxes that form the graphic interface of GEM programs.

ROM

Read-only memory. Memory that contains data that can be read repeatedly but can't be used to store or write new data by the computer. The memory chip containing TOS is a ROM.

Root directory

The first directory encountered when a disk drive is opened. It is the directory containing all other directories or folders and is specified by the disk identifier followed by a backslash, such as D:\.

RS-232C

The standard for serial interfaces for connections up to 50 feet and for transmission at up to 19,200 bits per second.



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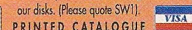
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CD ROMs and all that

This month we follow up our hard disk feature with a collection of articles about CD ROM technology. You are probably wondering what the fuss all about and what CD ROMs have to offer the Atari user?

Well, for a start, CD-ROM drives are not as common with Atari users as they should be. On the PC and Mac they are now standard items shipped with even the cheapest models. Users are already enjoying games, encyclopedias and other "infotainment" material thanks to CD ROM technology.

Atari users have been totally ignored by the major CD ROM software suppliers like Microsoft. But finally, there seems to be a solution in the name of SARA which is reviewed this month.

The other main use for CD-ROMs is for mass archive distribution. How else could you buy 600Mb of clip art or 500 fonts on a single disk? There is now a rather large selection of such CDs, some are Atari specific, containing hundreds of megabytes of programs, fonts, images and useful information. There are even Falcon specific games that make use of the vast storage space the CD ROM format offers.

PhotoCD technology is also the most affordable path into digital image manipulation. You can view and edit your holiday snaps or even use it professionally. Instead of spending hundreds of pounds on a scanner, you can have up to 100 of your images scanned and stored on a single disk at very low cost.

Another, often neglected function of CD ROM drives is the ability to play regular audio CDs. Depending on your setup, you can even sample sounds off the CD and transfer them to a hard disk for editing.

So, while I would always recommend you get a hard disk first, a CD ROM drive is a worthwhile addition to any system. It opens up whole new avenues to explore in the vast world of home computing.

Ofir Gal, Technical editor

DA DO ROM ROM

Ofir Gal tells you all you need to know about installing a CD ROM drive...



Apple's CD300 is a popular and well-supported drive. Later models do not use a caddy and the latest incarnation, the CD600, is a quad speed drive.

CD ROM technology is taking the PC world by a storm. Often mentioned with words like multi-media, it has successfully been blown out of all proportion. So what is CD ROM?

The Technology

The CD ROM is very much like a hard disk or any other storage media. The most significant difference is that it is a read-only device - you can't save any files to it. A bit like a write-protected floppy disk. So why is it such a significant format? Simply because it enables software houses to distribute huge amounts of data at a very low cost. The CDs are identical to music CDs. They can contain over 600Mb of files and manufacturing costs are very low. Some predict that the CD ROM will completely replace the floppy disk as means of distributing software, but that remains to be seen.

The PC and Mac scenes are already saturated with CD ROM titles. Anything from talking books, to games and encyclopaedias is now available. The vast storage space the format offers

allows software authors to include animation, pictures and sound and still have lots of free space left.

Back In Atari-Land

Sadly, due to market forces, Atari computers have been neglected by the major CD ROM producers. However, with the advent of programs like SARA, there is still some hope of being able to have a slice in the so-called multi-media revolution. In contrast, there is a lively market of PD and shareware collections alongside other Atari specific titles. Turn to page 62 for a run-down of the current available CDs.

Like hard disks, CD ROM drives are available in two flavours - IDE and SCSI. These are two standards that allow the connection and data transfer between the drive and the computer. They have no effect on performance. Falcons and TTs already have a built-in SCSI controller and older models like the STe can be made SCSI compatible by adding a host adapter. While SCSI drives are the standard as far as Atari computers go, IDE devices are very popular among PC users. There is



Older drives that are still widely available use a caddie, instead of the tray loading system normally used in hi-fi systems. Although it is not as convenient, the caddie does offer added protection to the surface of the disk.



Compo's CD ROM ROM connects directly to the cartridge port, removing the need for a SCSI host adapter.

currently no IDE adapter available for Atari computers, so you will be well advised to avoid IDE drives altogether.

Installing a CD ROM Drive

The simplest solution is to get a complete package from an Atari dealer. The specific configuration will depend on your current system, which computer you have and what hard disk setup is connected to it.

If you have an ST, STe, MegaST or MegaSTe without an external hard disk, you will need to obtain a SCSI host adapter. This is also true if you have an old style non-SCSI drive like the MegaFile. The ICD Link II seems to be the device of choice for the job, having been proved the most compatible. It adds SCSI capabilities to your system which means that you can also connect a hard drive. A single SCSI host adapter enables you to connect up to seven SCSI drives!

Another plug-and-play solution open to non-SCSI systems is Compo's CD ROM ROM. This device is a standard multi-session double-speed CD ROM drive with a special cartridge port based

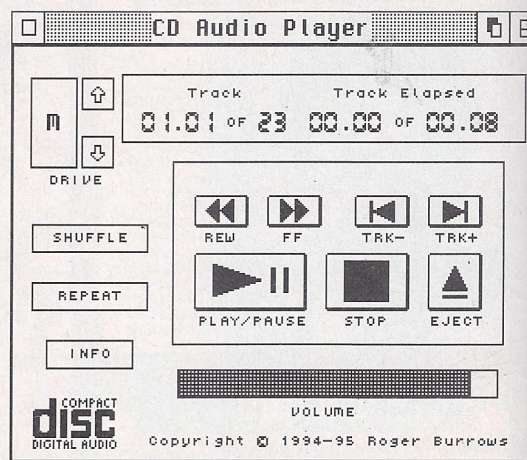
interface, specifically designed for the ST. The system uses a MetaDOS based driver which is supplied with the drive along with an audio player. The main advantage of this system is that it is absolutely foolproof by avoiding the pitfalls associated with SCSI. Keep in mind that a SCSI based system will be considerably faster.

If you already own a hard disk with a SCSI through port, all you need is a SCSI CD ROM drive and a suitable driver software. The same applies to all Falcon and TT owners out there, as both computers feature a SCSI port as standard.

The Software

In order for your computer to work with the CD ROM drive you require special software. The standard hard disk driver does not support CD ROMs. If you own a TT then you're in luck. MetaDOS was created by Atari and is available from PD libraries and bulletin boards. It is a little complex to set up, but once it's going it works reliably. If you don't own a TT, then you can use one of the free MiNT CD ROM drivers. You will also need to install MiNT. There are also several shareware drivers available for the Falcon, but these don't support all drives.

If you want an easy life, your best bet is to use ExtendoS, available from System Solutions. This driver provides compatibility with a large number of models and uses caching to significantly improve disk access. It also features a basic audio CD player, so you can use the CD ROM to play music while using your ST for other things.



ExtendoS includes a desk accessory, allowing you to play audio CDs in the background.

Jargon buster

CD ROM - Acronym for Compact Disk Read Only Memory.

Single speed - The first CD ROM drives worked at a transfer rate of around 150Kb/sec. Compare that with a typical hard disk that performs at 1Mb/sec or more and you'll see why a single speed CD ROM is quite slow.

Double speed - Second generation CD ROM drives that can transfer data at 300Kb/sec and offer better access times. They are still considerably slower than a hard disk, but with the aid of caching software are quite usable. Most drives in use these days are double speed.

Triple speed - These drives have failed to become standardised as the quad speed drives appeared at the same time. They offer transfer rates above 450Kb/sec.

Quad speed - The latest CD ROM drives boast a transfer rate of 600Kb/sec or more, approaching a slow hard disk speed. Even with the improved transfer rate and access time, quad speed drives are still much slower than the average hard disk.

Transfer rate - The amount of data that can be read from disk in a second. There are several methods of measuring transfer rates which can sometimes produce misleading results.

Average access time - The average time, normally measured in milliseconds, it takes the read head to reach a track on the drive. This is crucial to the working speed of the drive. In general, the lower this value is, the faster the drive. The average access time of double speed CD ROM drives is around 300ms. Quad speed drives are slightly faster at about 200ms, while hard disks have access times of 10-20ms.

Double session - Some CDs, mainly PhotoCDs, allow the recording or storage of files in several stages. If there is free space on the disk, it is possible, with the right equipment to add more files to it. The downside is that only a multi-session capable drive will be able to read the added files.

Single session - Older CD ROM drives were not able to read data past the first storage session. These drives are no longer being made.

Tray loading - Older drives use a caddie system, where the CD is first placed into a plastic case which is then loaded into the drive. Caddie-less drives use the same tray loading system used in standard audio CD players.

MetaDOS - A CD ROM driver developed by Atari that only works on the TT.

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CD ROM

roundup

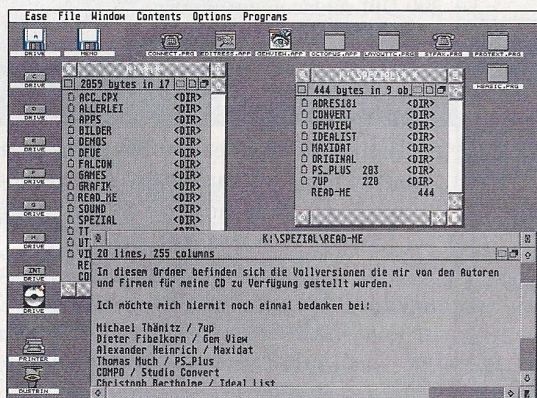
CD ROMs come under the hammer and Graeme Rutt is the auctioneer.

I can't remember which year Atari first announced the Atari CD ROM drive. I can remember that it was revolutionary at the time and I can remember that – like a lot of Atari announcements – it came to nothing. That was then, this is now, and a heck of a lot of water has passed under a wide variety of different bridges. What has happened in recent times is an unprecedented rise in CD ROM drive sales to Atari users. To begin with we had to make do with system generic CD ROMs which contained clip-art, a few Speedo fonts and a lot of useless (to us) PC programs. Thankfully the Atari vendors followed

the market so that Atari specific CD ROMs were produced.

A quick call to the various Atari vendors around the country soon saw my letterbox inundated with a wide range of discs. Most are collections of Atari public domain and shareware products although I have included several other discs – mainly for their interesting content but also to give you a flavour of what's out there.

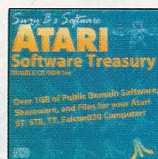
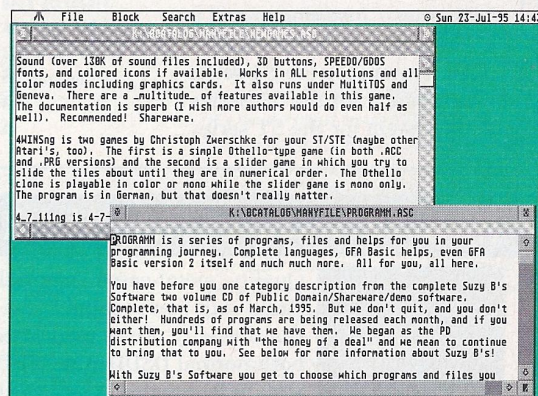
So, without further ado, I'd like to introduce you to a round-up of all the Atari specific CD ROM discs that are available in the UK – and a few others. Please refer to the table for more information about each disc.



The Power CD has some really nice full-version software, unfortunately the text is all in German.

STe Power CD Volume 1

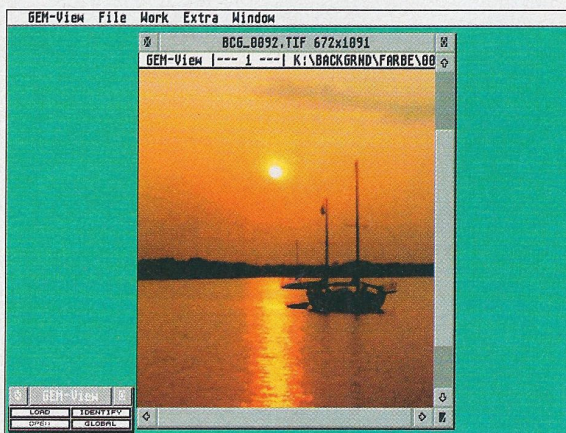
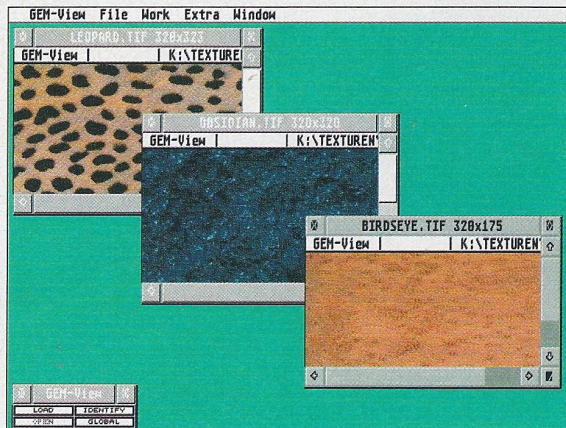
This CD is a straightforward affair with various bits of Atari public domain and shareware software in a standard folder hierarchy. The software is uncompressed and each program (and associated files) lives in a folder all of its own. The paper documentation is virtually non-existent (as with many of these CDs) and the on-line listings are all in German. There are also some 'full' versions of older shareware products like GEM-View, Address, 7-UP and Studio Convert.



As well as featuring a huge amount of software, Suzy B's Software Treasury has great descriptions.

Atari Software Treasury

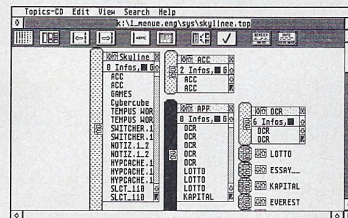
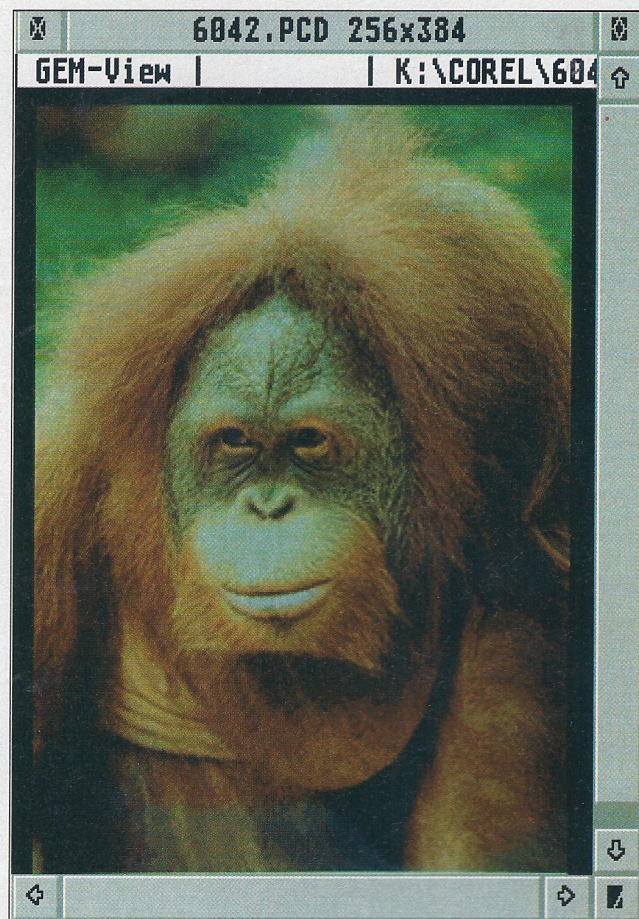
This gargantuan 2-disc set of Atari software covers everything from games to MiNT software to sound files and pictures. There's an attempt at an online catalogue by providing the public domain text editor, Alice, on the root of each disc to view the English text files that give an overview of each and every file. A lot of work has gone into providing these descriptions and it provides a reasonably easy way of finding what you want. Unlike many discs the files were taken from bulletin boards rather than the Internet which has given the contents a very different flavour.



Textures and backgrounds aplenty – the Publisher's Source Background Disc is ideal for the home desktop publisher.

Publisher's Source Background Kit 1

This is the first disc covered which isn't a collection of software. Instead it's a disc packed with textures and backgrounds for desktop publishing and other graphics tasks. There are nearly 200 backgrounds and 50 textures. Each file is in the TIFF format and both the true-colour and grey-scale versions are available on the disc. There is a small range of Atari graphics software on the disc – mainly graphics viewing utilities. Files are not catalogued on disc but all the pictures are shown in the CD sleeve, along with the filename.



This is the Skyline's unique file browser – takes a bit of getting used to but makes finding files a breeze.

Skyline

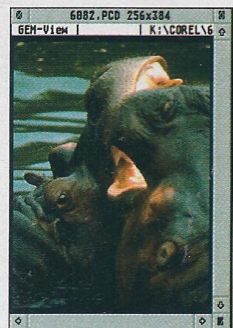
This disc, compiled by the same author as the STE Power CD, Michael Wehner, is again a software based CD but also has some data files in the form of sound and music modules along with clip-art and pictures. As with the STE Power disc it contains a number of 'full version' programs supplied by the authors. They include OCR 1.3, GEM-Font 1.22 and Tempus Word Junior. This is also the only CD to feature an on-line cataloguing program – making browsing the disc a breeze.

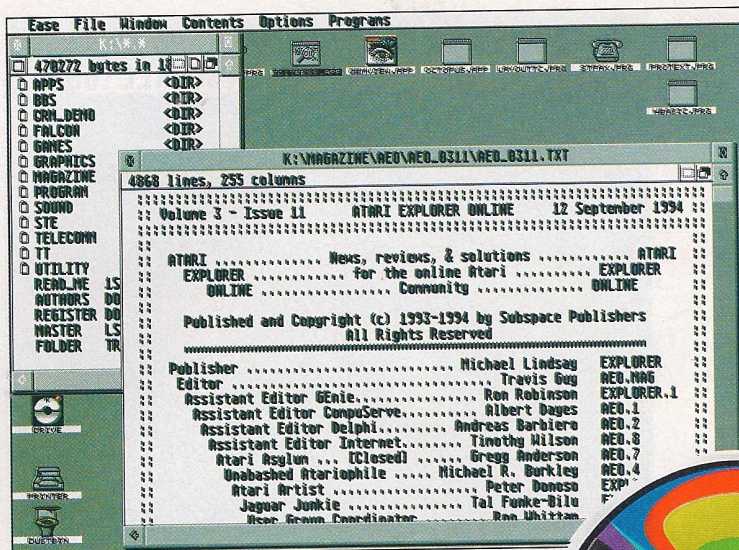


Wild Animals from Corel Photos – rumours that these depict the writer and his family at play are utterly untrue.

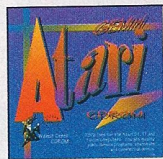
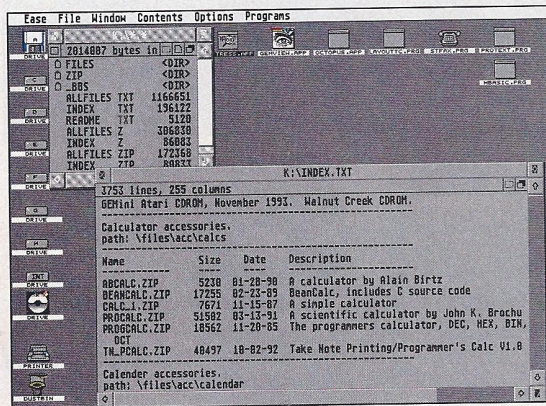
Corel Professional Photo Series – Wild Animals

I've included this one not because I'm particularly interested in Wild Animals but because I felt that the Corel Professional Photos CD ROM series deserved a mention. More than 100 separate titles are available, each with 100 photographic images in PhotoCD format. All PCD sizes from 128 by 192 to 2048 by 3072 are recognised and all images are free from copyright. For professional layout/graphics people these discs are ideal – although you'd need a lot of memory to work with the largest size picture.





The Atari electronic magazines in the Crawly Crypt make for some very interesting reading.



Gemini has more ways of finding files you want than you can nod your head at – a marvel of good presentation.

Gemini Atari CD ROM

This collection of Atari software from Walnut Creek is one of the best presented discs I've seen. All folders in the hierarchy have a brief file listing along with a longer descriptive text. All files are available in both uncompressed and compressed format – and the latter have the correct 'files.bbs' file so that Sysops can make the data available straight from their bulletin boards. The disc also features a wide range of clip-art and fonts in both vector and bitmap format. You should beware though that this was just about the first Atari CD ROM available and the programs are all older than November 1993.

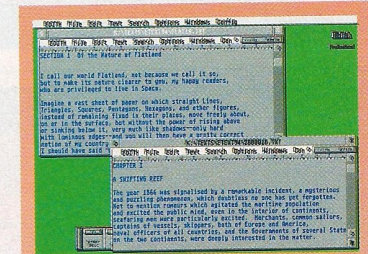


WOW! Vol. 2

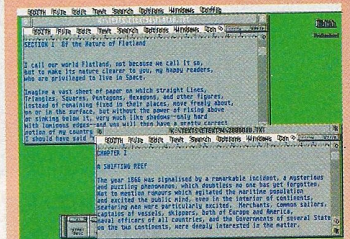
This German CD is the smallest (in terms of megabytes) in the round-up and doesn't even feature an on-line listing of the files. What it does boast is a large range of clip-art and over 500 TrueType fonts (for use with NVDI 3 or SpeedoGDOS). It also has a reasonable range of public domain software which although limited compared with other discs has a decidedly different flavour. A good disc for font and clip-art junkies but a real 'browse-and-hope' affair if you need a specific file.

Crawly Crypt Collection

The first fruits of the "It's All Relative" CD output to reach these shores, the Crawly Crypt Collection is a straightforward assortment of Atari public domain software. It's a good collection, none-the-less, with an all but packed 648 Megabytes of data covering a wide spectrum of Atari material. Of particular interest is a huge range of commercial demos and electronic magazines. Test descriptions are available in each folder, along with a global description text, making finding files a doddle.



Just two of the public domain e-texts – Flatland and 20,000 Leagues Under the Sea



There are even some pictures – this is the first of the Alice in Wonderland collection.

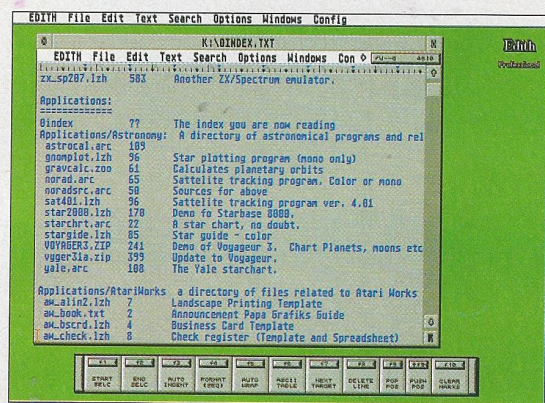
Project Gutenberg

Project Gutenberg is one of my favourite projects currently happening in the computer world. Named after the first printing works it's an attempt to collect as many electronic texts (e-texts) together as possible. They are all public domain texts and are presented in 'plain vanilla ASCII' making them suitable for viewing on just about any computer system.

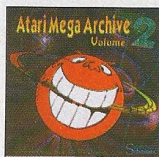
The texts themselves cover a huge range of subjects – there's the bible (King James version), every play Shakespeare ever wrote (allegedly), the American Declaration of Independence, The Adventures of Sherlock Holmes and much, much more. In fact, it's the avowed aim of the creators to produce 10,000 e-texts by 2001 – and I think they're going to do it.

This disc has over 200 texts, from 1990-1994 and the output seems to be doubling (at least) every year. Just like their Gemini CD ROM, the people at Walnut Creek have really presented this CD well – with the texts, compressed archives of the text and the correct files to stick it straight onto a range of bulletin boards.

If you like classic texts then this is a CD you should get. Available from anyone who stocks Walnut Creek products.

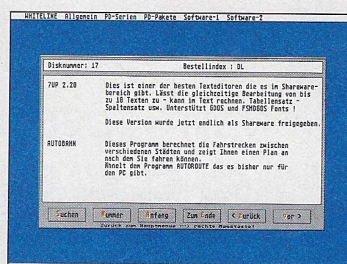


The Mega Archive includes short descriptions of each of the 1.9 Gigabytes worth of file.



Atari Mega Archive 2

The Mega Archive is compiled by Simon Gornall and published by System Solutions. It's an effective attempt to bring the Internet based Atari Archive at the University of Michigan to disc. All files are compressed and the disc contains an impressive 1.9 Gigabytes of data in an uncompressed state. Decompression software is available on the disc and all files have a small description in the hierarchical indexes. The Atari Archive has always been the biggest file depository on the 'Net and now it's available in your CD collection.



Has a nice kataloguing (sic) system - shame it's all in German.

Whiteline CD Series

This is another German disc which features a wide range of fonts, clip-art, movies, sounds and public domain software. Files are uncompressed and most will run from your CD ROM drive. All the files in the DL software library may be browsed and searched using a rather good (but unfortunately German) cataloguing program but the rest of the files on the disc hardly have any description at all. None-the-less a good disc for those who want data along with your shareware files.

CD ROM games - on the Falcon?

Those wily programmers at Silmarils have made up a CD that has both the Atari and PC executables and they share a common data-pool of graphics and so on. The two games chosen for this treatment are Ishar 3 and Robinson's Requiem. Both have already been released on normal floppy formats and both are reasonably good games. Ishar is a standard role-playing game and Robinson's Requiem takes you through a first-person perspective adventure on a less-than-deserted prehistoric planet.

The difference is that the CDs have film-clips, along with rather cool sampled sound. The intros of both are pretty awesome, showing the best real-time film footage ever seen on the Falcon.

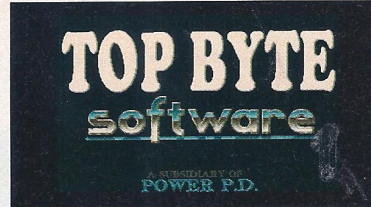
Neither products have a UK distributor yet but when they do - and if you have a Falcon plus CD ROM drive - then check them out.



	STe Power CD Volume 1	Atari Software Treasury	Crawly Crypt Collection	Background Kit 1	Skyline	Wild Animals	Gemini Atari CD Rom	WOW! Vol 2 Solutions	Atari Mega Archive 2	Whiteline CD Series
Publisher	Compo	Toad Computer	Crawly Crypt Co	Software Service Seidel	Michael Wehner	Corel	Walnut Creek	Software Service Seidel	System Solutions	Delta Labs Software
Software	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Compressed	No	No	No	No	No	No	Both	No	Yes	No
Clip Art	No	Yes	No	No	Yes	No	Yes	Yes	No	Yes
Pictures	Yes	Yes	No	Yes	Yes	Yes	No	No	No	Yes
Vector Fonts	No	No	No	No	No	No	Yes	Yes	Yes	Yes
Paper Docs	No	No	No	Yes	No	Yes	No	No	No	German
On-line Catalogue	German	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes
On-line Viewer	No	Yes	No	No	Yes	No	No	No	No	Yes
Megabytes	391	1229 (2 disks)	648	588	413	513	660	272	629	444
Distributor	Compo	Various	16/32 Systems	System Solutions	System Solutions	Various	Various	System Solutions	System Solutions	System Solutions
Price	£24.99	£49.95	£29.50	£19.95	£24.95	£24.95	£24.95	£24.95	£24.95	£24.95



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PRESENTS...



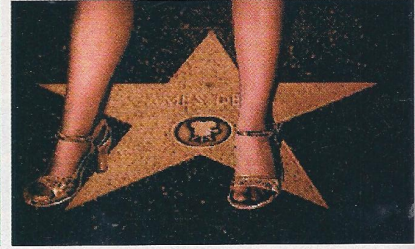
YOU'VE LOST YOUR JOB...YOUR GIRLFRIEND HAS LEFT YOU... AND YOUR CAR HAS JUST BEEN REPOSSESSED! NOW YOU'RE ALL ALONE ON THE STREETS OF HOLLYWOOD - WITH NOTHING TO LOSE AND EVERYTHING TO PLAY FOR! YOU MUST NOW PUT ON YOUR POKER FACE TO WIN BACK YOUR LIFE BY BEATING JOE, CHUCK AND THE LEGENDARY MONTANA SLIM AT THE GAME THEY'RE BEST AT...POKER! YOU'RE GONNA HAVE TO BE A MEAN HUSTLER IF YOU WANT TO TAKE ON THE BEST VEGAS HAS TO OFFER!



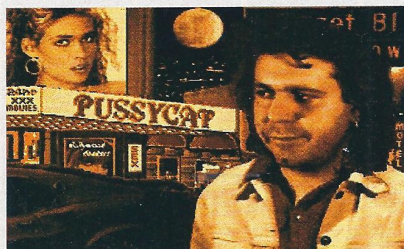
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LIFE OF LUXURY...
...OR WILL YOUR PROBLEMS HAVE TO
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ACTORS! ...AND LOTS MORE!



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◀ THIS IS YOU
AND THESE ARE YOUR OPPONENTS ▶
**ARE YOU GOOD ENOUGH
TO BEAT THEM?!**



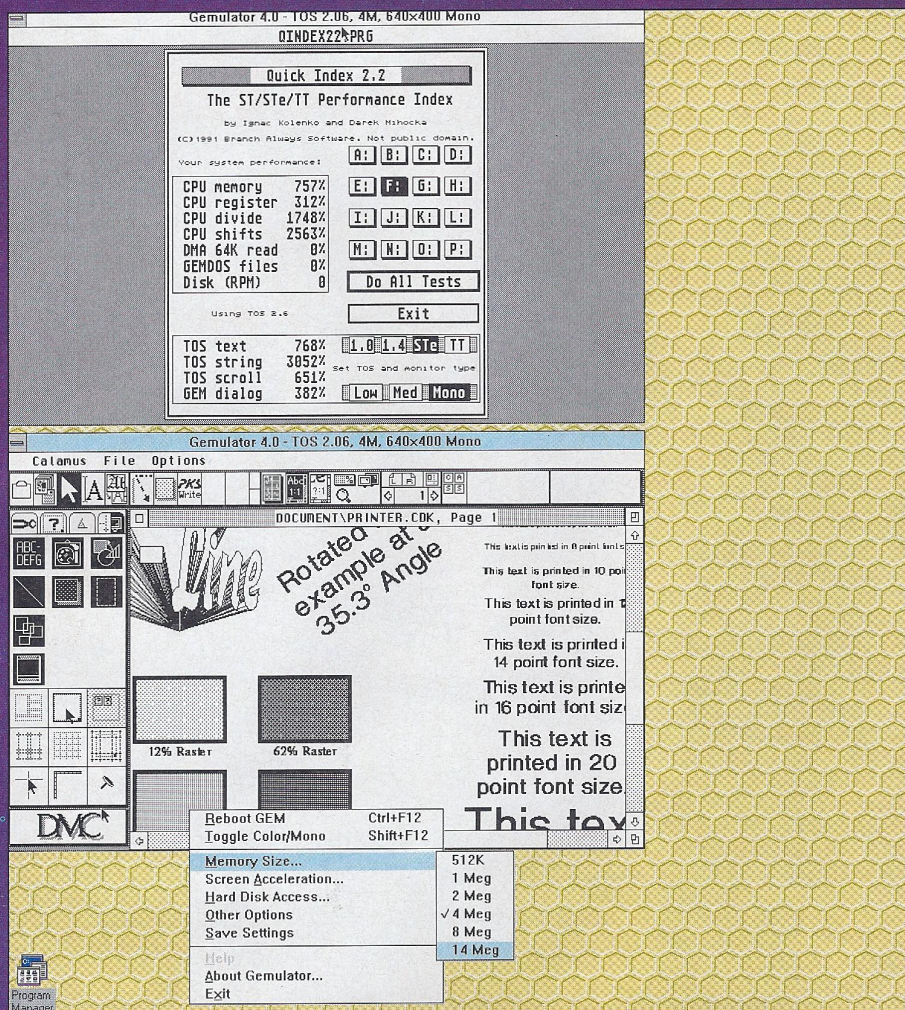
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NEW *Gemulator 4.0*

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Introducing *Gemulator 4.0*, the Atari ST/STE emulator designed specifically for use on Windows. It turns your PC into an Atari clone that's on par with any high end Mega ST or Atari TT030 computer - for a fraction of the price. *Gemulator 4.0* now has CD-ROM support, higher VGA and Monitorm graphics resolutions, MIDI support, more ST memory, joysticks, multiple modem and printer support, easy menu based configuration, can read and write Atari files to any hard disk partition on your PC, (Double space and Stacker drives too), and more). Grab clip art from your PC's CD-ROM drive and paste it into your Atari programs. Run multiple Atari desktops at the same time, each running a different program and in different screen resolutions!

As this Windows 95 screen shows, you too can run your Atari ST and Mega ST/STE programs side-by-side with your MS-DOS and Windows programs. Why wait for Windows versions of your favourite Atari programs (which may or may not ever appear) when *Gemulator 4.0* runs them now! Our users have been running Pagestream, Calamus SL, and all their favourite Atari programs on their PC's since 1992.

Planning to upgrade your existing Atari ST, Mega ST/STE, Falcon, or tt030? In a word - DON'T! If you consider the cost of a TOS 2.05 upgrade (\$139), Monitorm monitor (\$500), 8

meg of ST RAM (\$649), CD-ROM drive (\$249), hard disk upgrade (\$400), and 1.44M floppy (£100), you've already spent more money than the cost of a new pentium computer with *Gemulator 4.0* - and you still can't run Windows software!

Gemulator 4.0 is a card that plugs into your PC (using an 8-or16-bit ISA slot). It runs on any 488 or Pentium with at least 8 megabytes of RAM running either Windows 31, OS/2 Warp, or Windows 95. A 486/66 computer emulates at about Mega STE speed, while a 90 Mhz Pentium emulates the full speed of a 32 Mhz TT030. Cool, huh?

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Photo *finish*

Ofir Gal shows how to turn your holiday snaps into works of art! Well, almost...

PhotoCD technology brings low cost digital image manipulation to the home computer user. Instead of investing in an expensive scanner, you can have your films transferred to a CD ROM at a relatively low cost. With the help of a CD ROM drive, you can use your Atari computer to view, edit and print your photographs.

The PhotoCD concept

PhotoCD technology was developed by Kodak in its bid to get an early start on the digital image market. Rather than being a professional user tool, PhotoCD was aimed squarely at the home consumer. The new technology was first marketed as a way of viewing your holiday snaps on your TV screen, using a special PhotoCD player that was also

capable of playing standard music CDs.

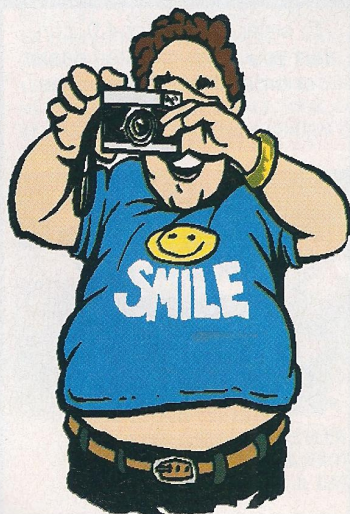
The remote control could be used to zoom in on sections of the image and it had a few other less useful options like rotate image and so on. Not surprisingly, PhotoCD never caught on with the general public. Instead it found a place with DTP and layout enthusiasts. There is now a wide selection of pre-scanned images available in PhotoCD format, covering anything from wildlife and landscape to food and sports. Even background images and textures are becoming available.

Image manipulation

So why would you want to edit a holiday snapshot? When we look through the camera view finder everything looks just great. Somehow this is not always apparent when the prints come back from the lab...

Are you familiar with the "red-eye" syndrome? Has someone you don't know manage to walk into the family photo? Is the most important part of the picture lost in shadow? Is the sky pure white instead of blue? All these problems and others can be solved using programs like DA's Picture or Studio Photo.

Although most Atari systems cannot display the images in full colour, image editing programs allow you to edit the pictures in any screen mode, maintaining their colour content. While a true-colour display certainly helps, editing can take place in 256 colours or even less. The examples in this article barely scrape the surface of what is possible with a PhotoCD, an image editing package and a little imagination.



Studio Photo is a low cost image manipulation program with direct support for the PhotoCD format. Among other things, it also supports the Falcon DSP JPEG decoder.

The technical stuff

PhotoCD files are typically 3 to 5Mb in size. Each file contains the same image in five sizes ranging from 192 by 128 pixels to 3072 by 2048. This gives you a choice between a tiny 72Kb file to a huge 18Mb file suitable for a high quality A4 print. The data is compressed using a proprietary compression system, resulting in a single file containing a total of more than 20Mb of images.

PhotoCDs use a recording technique known as multi-session. Earlier single session technology only allowed a single storage session. Multi-session allows the scanning bureau to record additional data on the CD, until it is full. You are able to have one film transferred to PhotoCD and have a second film done at a later date. Your CD ROM player must be multi-session compliant if you are to read the second and third sessions, but virtually all modern players are.

Since PhotoCDs use a special file format, not all programs can read the files. Imagecopy CD, GEM-View and Studio Photo are examples of programs that will read PhotoCD files. Imagecopy has a unique feature, allowing you to only load in parts of the image which can be useful when memory is tight. Most of us don't actually have 18Mb of RAM lying around in which to store the highest resolution image...

The cost of transferring a negative film to PhotoCD is around £25 for 36 exposures. A single CD may contain up to 150 images. The PhotoCD scanning service is available from professional photographic labs as well as high street retailers like Boots.

Viewing Images

There are plenty of image file viewers for the Atari range of computers. Which one you should use depends on your system and budget.

The three favourites are Speed Of Light, Imagecopy and GEM-View. With Imagecopy you can create slideshows and produce printed catalogues of your CDs with great ease.

Now PhotoCD images are true-colour image files, containing up to 16.7 million colours. An ST is only capable of displaying 16 colours, yet with some clever techniques such as palette swapping and dithering, it is possible to achieve surprisingly good results.

An option worth considering is the addition of a graphics card. Even one that can only display 256 colours make a huge difference. Such cards not only provide more colours on screen, but also higher resolutions, resulting in a more detailed display. Depending on your budget, you can install a 24-bit card which will display the image in its full colour content. A Falcon is also suitable for true-colour display since it supports up to 65,000 colours on screen.

Although the human eye is said to distinguish millions of colours, it is also a fact of life that it is extremely difficult to tell the difference between a high-colour and a true-colour display. See the images below for a demonstration of the difference between the various screen modes. You can see that while 16 colours are not sufficient for any serious image editing, 256 colours certainly are. It's also quite clear that the difference between 16-bit and 24-bit modes, also known as true- and high-colour is very minimal.



16 colours only.



256 colours.



16-bit colour (Falcon)

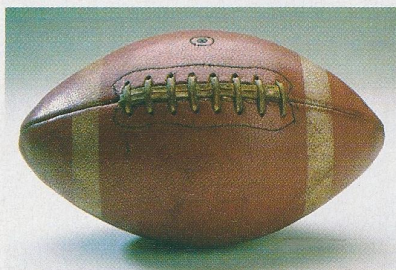


Professional 24-bit quality.

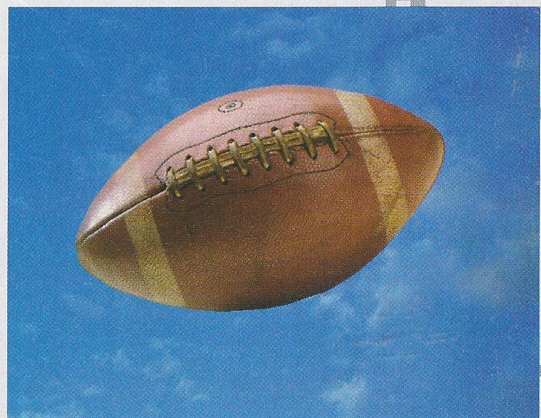
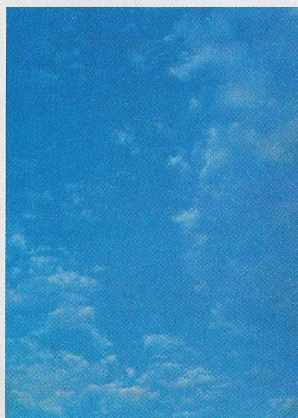
This table includes common display modes. Note that true-colour is not available on any Atari computer without the help of an expensive graphics card. However, 15/16-bit display is more than suitable for professional image retouching.

Colour table

Bits	1	2	4	8	15-16	24
Colours	2	4	16	256	32,768- 65536	16,777,216
Screen Mode	ST High	ST Medium	ST Low	Falcon, TT	High Colour (Falcon)	True Colour



The images of the ball and sky were taken from a commercial CD ROM containing dozens of high quality images. The composite was created by first scaling the rugby ball down, then masking the white background out. The ball was then rotated and copied over the blue sky backdrop.



The Output Stage

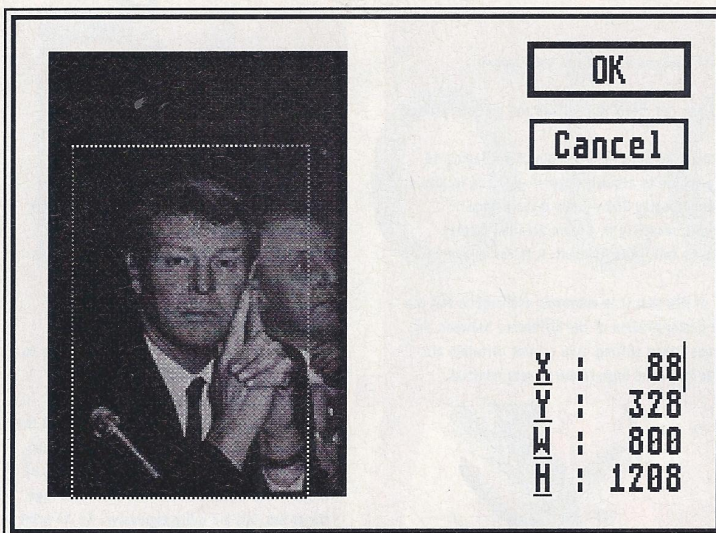
Producing a print from an image you have created or edited on your computer is not as simple or as cheap as it should be, especially if you want photographic quality.

The cheapest way to get your image on paper is to use a colour inkjet printer like the DeskJet or Epson Stylus. These printers can produce excellent results and are directly supported by programs like Imagecopy. Alternatively, you can use a monochrome printer and a colour kit to print the colour components one at a time. This is not likely to produce as good a result though due to difficulties with aligning the paper.

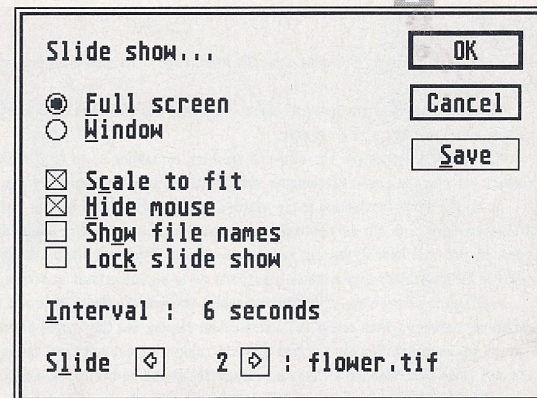
Professional labs will be able to output the image to a colour slide or photographic paper, a process known as pictography. The quality of these is the same if not better than your high street lab, but are quite expensive. An A4 print can cost almost £30 and in order to obtain the best quality you must use the largest PhotoCD image – that is 18Mb. For a smaller print, a 4.5Mb file is sufficient.

If you want real size, JCA Europe (01734 452416) are offering to output a wide range of colour images to large formats using a professional print system. You can send them an image in TIFF, PhotoCD, JPEG, Targa or GIF format (to name but a few) and they'll print it out at anything up to a whopping A0 size (roughly 3 by 4 feet!).

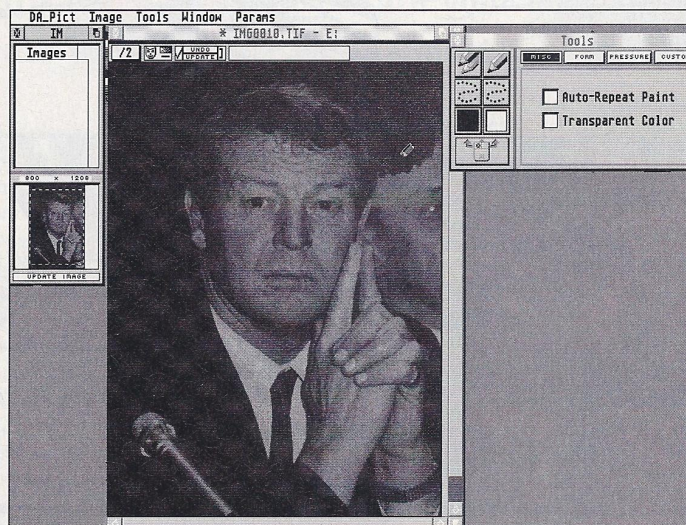
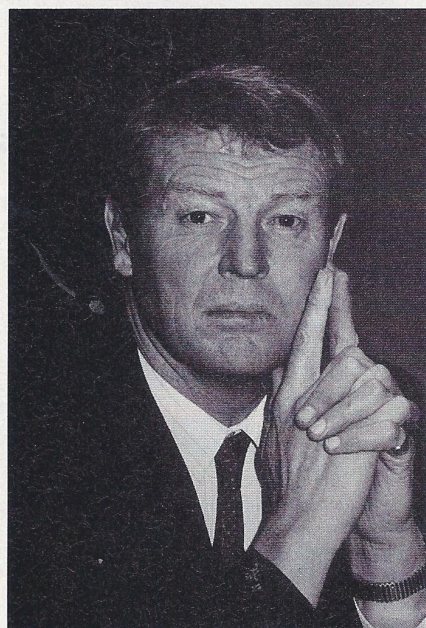
It'll cost you around £30 for an A1 and £55 for A0 but there'll be a special competition next issue in which three lucky readers will get their images printed out as posters. So before we formally announce the competition, you can start work on those holiday snaps right now! A clue – it'll all hinge on the most original image...



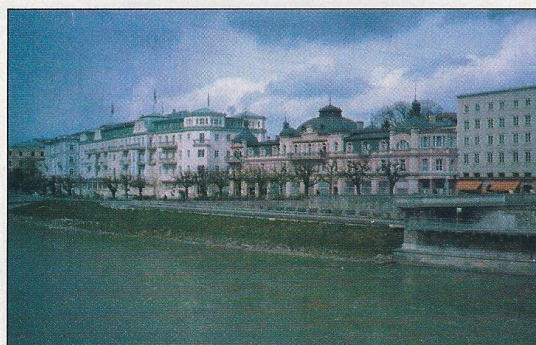
Imagecopy 4 CD has a unique pre-crop facility that allows you to import a section from a large PhotoCD file. This means that even the high resolution 4.5Mb and 18Mb images are accessible.



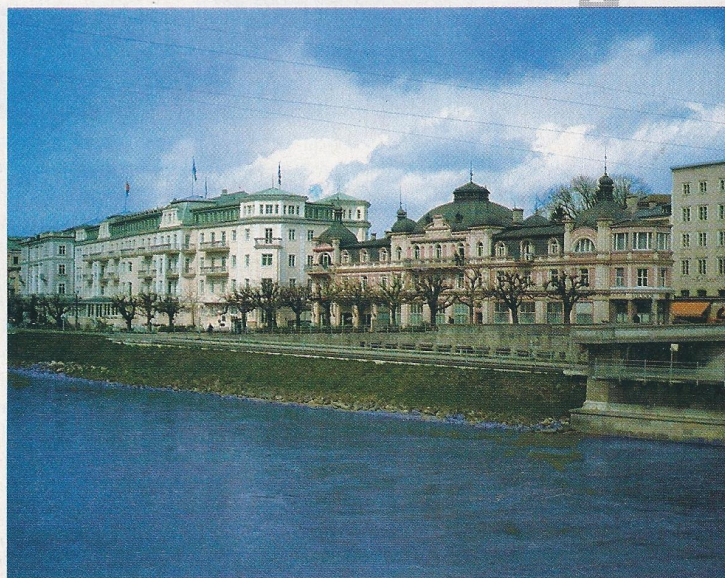
Using Imagecopy you can create a slideshow presentation. Imagecopy can display the full contents of the CD, or a pre-defined list of images.



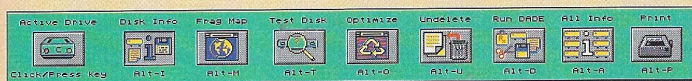
The image on the left is being edited to remove the person sitting next to Paddy Ashdown (some may prefer to remove Paddy Ashdown instead). Using the clone tool in DA's Picture, the grey background is copied over the face of the person. The microphone in front of Mr. Ashdown is also cloned over. Following that, the image is sharpened and the overall contrast and brightness are also adjusted. The final image is shown directly above.



Come rain, come shine... This holiday snapshot of Salzburg in Austria looked a little miserable. Using selective masking, it was possible to adjust brightness, contrast and colour balance of sections of the image without affecting others. By making the sky and river blue and adding a little yellow to the building, the image was transformed into the sunny scene on the right.



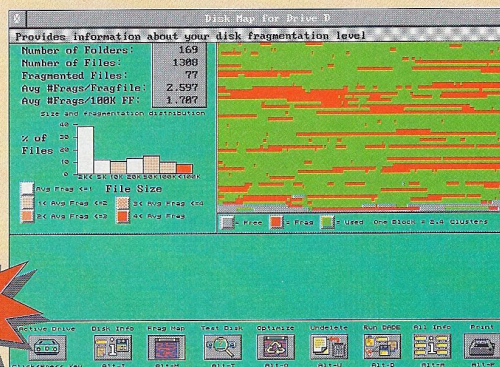
Diamond Edge 2 Ships!



Finally, the wait is over. The biggest upgrade to the best disk utility program ever is complete and is shipping *now*! Over two years of programming have gone into this Diamond Edge upgrade that *no* Atari owner should be without.

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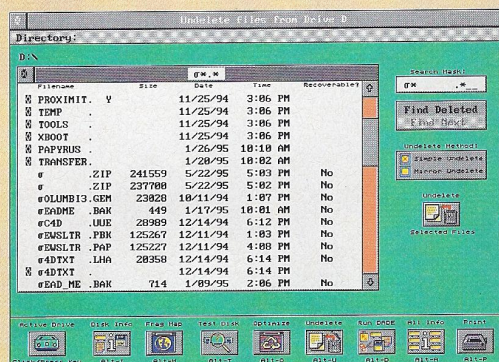


The Disk Fragmentation Map plus Statistics

Diamond Edge, the most popular and powerful hard disk management tool package for the Atari has undergone its first major overhaul in 2 years. New features include a streamlined, re-designed user interface, many new and enhanced functions, internal speed optimisations, plus new programs like Diamond Mirror 2 and Diamond Advanced Disk Editor (DADE).

Re-designed from the ground up with the user in mind, Diamond Edge 2 is the most advanced, easiest-to-use disk management system available for TOS computers. It is fully compatible with all Atari computers and disks, disk formats, TOS versions, and alternative operating systems like Multi-TOS, Geneva, and MagIX.

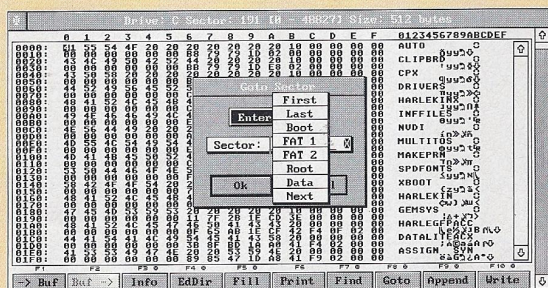
Protect yourself from data loss with Diamond Edge 2 at a great, value-for-money price; comparable software on other platforms costs over £100. Diamond Edge 2 is economical insurance against disk problems and data loss. You simply cannot afford to be without it! Upgrades include a completely re-written and expanded manual.



Diamond Edge 2; un-deleting files is a piece of cake

There are two types of computer users; those who have lost data and those that *will* lose data. Diamond Edge 2 creates a third ruling class: those that are protected from data loss! Your data is too valuable to be without the protection of Diamond Edge 2.

Diamond Advanced Disk Editor

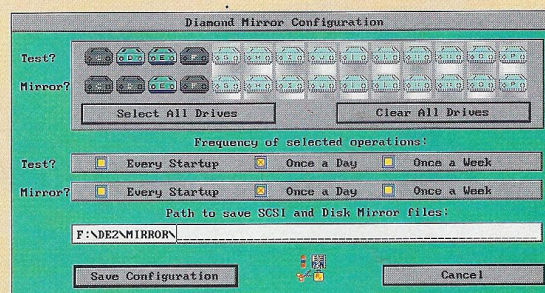


DADE - the powerful disk editor included in Diamond Edge 2

There are other disk editors, but none as powerful, flexible, and easy to use as DADE. Specifically designed with time-saving and impressive features to aid any editing or recovery effort, there is *no* other disk management system that offers as much, including Physical Device Level Disk Editing. The ultimate in data recovery and low level power tools.

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- Convenient function button bar. Many with special time saving features when double-clicked.
- Easy-to-use Directory Edit window decodes the information for you with a trace feature for FAT entries for a file. Very nice!
- Flexible Fill function.
- Powerful search and replace function.
- Rebuild lost files sector by sector.

Diamond Mirror 2



The Diamond Mirror Configuration dialog

Diamond Mirror 2 (use regularly to 'snapshot' your drive) has been greatly enhanced to include complete testing of disks at boot time as well as keeping backup copies of Mirror Files.

Upgrades ➔

Upgrades from version 1 of Diamond Edge cost only **£29.95** - just send your master disks back with your remittance. Silver or Gold support customers can order over the phone with a credit/debit card - please call for details.

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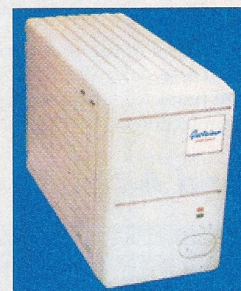
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Quantum 850	836Mb	1in	4,500 rpm	10.8 ms	300,000	2 years	£199	£249
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Que SARA?

Alexa Robinson's Falcon suffers the odd twinge of PC jealousy. But with SARA it can view the Grolier Multimedia Encyclopedia...

SARA is an unusual product – in fact it's a front-end access to the Grolier Multimedia Encyclopedia CD ROM, which is normally a PC-only product. It has to be said that it is pretty basic and it only gives you a way to access the text, sound, pictures and maps. The many animations in FLI format and AVI video clips available on the CD ROM can't be used at all and even on a Falcon with an SVGA monitor you can only view the pictures in 16-colour mode.

Having established that SARA won't turn your Falcon into a multimedia workstation overnight, what will it do? To be fair, accessing the vast quantities of data from a PC-based multimedia CD is a first on the Atari and is an accomplishment worthy of applause. ABC Solutions and Proton Research, the developers, have made a big step in the right direction. And in the future, who knows? This system could open up a powerful and exciting doorway into the PC/Mac multimedia world.

This version of SARA is specific to the Grolier Encyclopedia version 6.0, so you can't buy SARA expecting to access any PC CD ROM. Forget Encarta and Cinemania – it's Grolier or Grolier with this version. Having said that, the Grolier offering has a staggering amount of information, including images, sounds and articles on every subject under the sun (not

to mention a few that aren't). In fact there are 33,000 articles and hundreds of supporting pictures and diagrams. It also has the advantage that it is very cheap to buy, having been totally eclipsed by products like Microsoft's Encarta and the UK developed Hutchinson Encyclopedia.



Sixteen colours is fine for maps although they're a little sparse on detail.

Seeing clearly

Clearly you have to have a CD ROM drive and the faster the better unless you enjoy twiddling your thumbs waiting for the search feature to find what you're interested in or your chosen image to load. Extends is recommended as the CD driver but it should work with others such as the MultiTOS one.

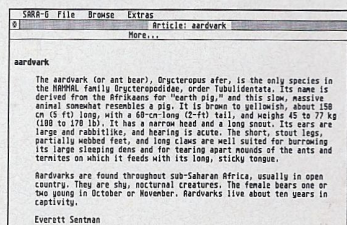
To get at the text, you need 2Mb of RAM (4 Mb recommended), TOS 1.6 or higher and a high resolution mono monitor. To access the pictures, 4Mb is required with a screen display of at

least VGA resolution (640 by 480 pixels) and TOS 2.06 or later. This means that in practice you need a Falcon or a souped up (graphics-wise) Mega Ste or TT.

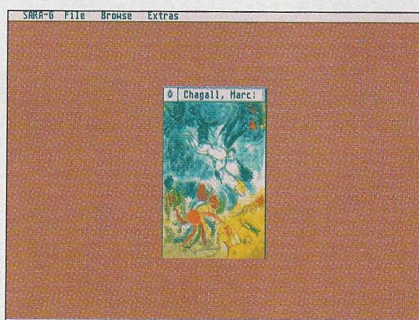
Accessing information is very straightforward and can be done by title, category, timeline, pictures, maps and sound so it is very easy to use. You can search for information to, using the fairly ordinary - but nonetheless powerful - search feature.

This Grolier encyclopedia also has a strong US flavour. While there are topics like films, publishing, television, journalism and so on you will have a hard time finding a British face – except for the ones that have made it to Hollywood!

The SARA software is pretty good and it does what it can very well. Perhaps the biggest failing is the choice of the Grolier CD ROM as the chosen reference work because it is hardly the best of the bunch. SARA can't match the PC front end but if you want to try a CD ROM reference title and you're not too bothered about the bells and whistles and motion video, then SARA isn't a bad effort.



One of the 33,000 articles displayed on screen.



This is typical of the quality and style of the Grolier Multimedia Encyclopedia, although admittedly some pictures are in 16 colours.

S A R A

Publisher: ABC/Proton
UK distribution: 16/32 Systems
Contact: 01634 710788
RRP: £33
Requirements: Any 4Mb Atari • 640 by 480 screen resolution

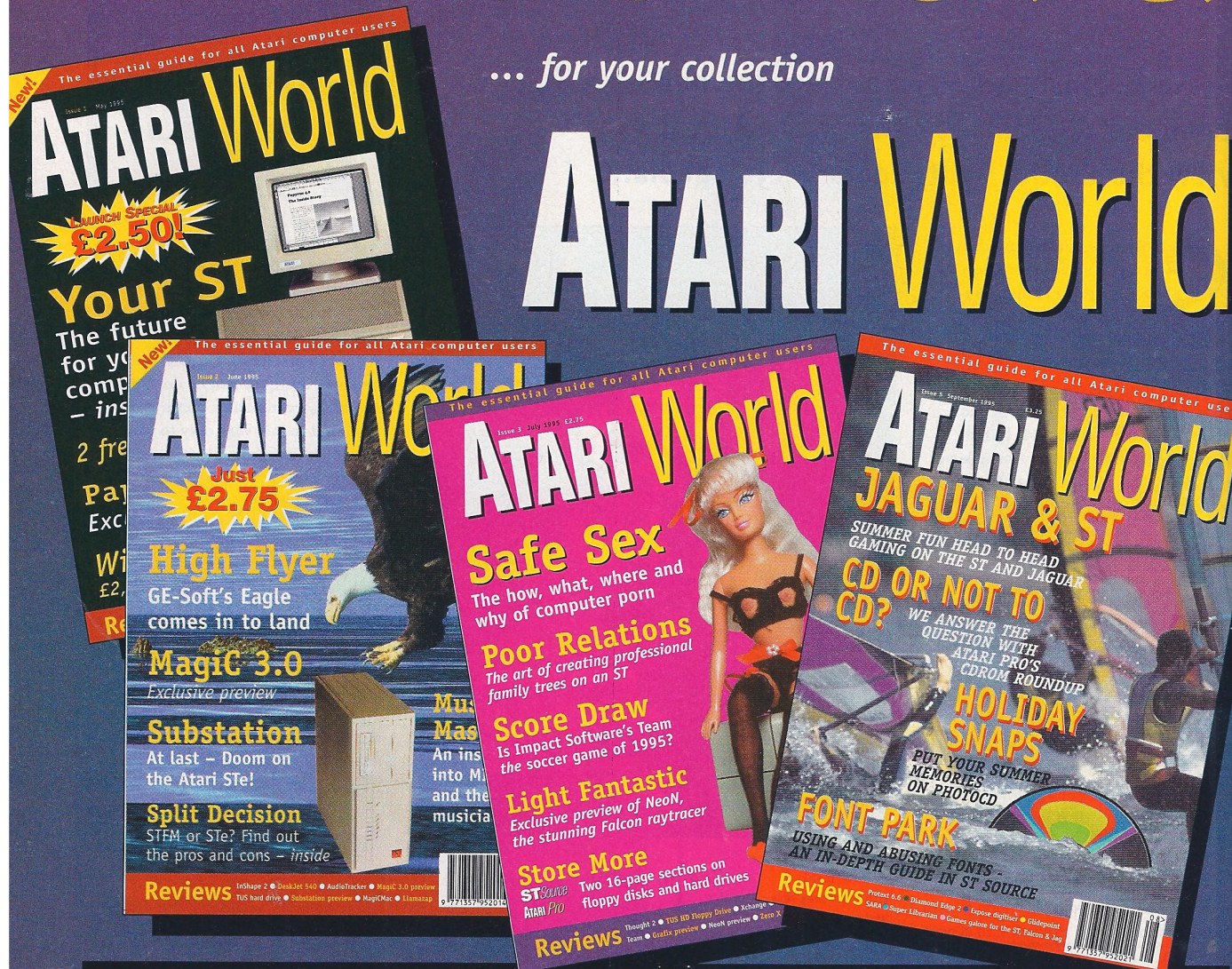
• TOS 2.06 or later and CD ROM drive for full access.
Pros: How else could you do it? • 33,000 articles at your fingertips
Cons: 16 colours only • no animations • heavy hardware requirements.

SCORE: 5

Readers Disk &

... for your collection

ATARI World



Just for you – a Reader Disk rundown

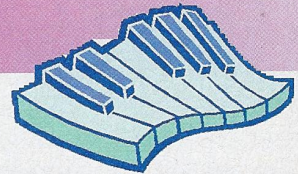
- **Issue 1 (1 Disk)** ST-Guide Release 4, ST Guide Creator 4, Darklord v3.1, Pinhead v2.1, PacShell v2.59, Profile v2.08, TurboBlanker v1.24.
- **Issue 2 (2 Disks)** Speed of Light v3.8, Bootsie v1.74, World Clock v1.0a, GDOS-Check v2.0, Maus-Window v1.32, Duet v1.0e, Vericard v1.0, Thing v0.31e, Thing Utilities, Atari World Profile.
- **Issue 3 (1 Disk)** Thought 2 Demo, GD-Flag v1.15, IdeaList v3.6, Fastcopy III, Kivi v1.37a, Atari World Profile.
- **Issue 4 (8 Disks!)** Address v2.2, AVFM v1.0, LED-Panel v3.1, Mouse23 v2.3, Atari World Profile, Turtle v3.2, Timeworks 2.01.
- **Issue 5 (1 Disk)** ImCon v1.1, InsChar and InsDate, Let 'em Fly! v1.3, MasterBrowse v4.9, OCR v1.4a, Text Analyzer.

Sequencing

-beyond the manual



Can you play ping pong with your sequencer?
Ian Waugh explains how...



I promised we'd do something creative this month so let's see what practical uses we can find for MIDI delay. This has nothing to do with delayed MIDI signals which can cause havoc with your music but with offsetting a track in time so it plays a little later than the others.

The first thing to do is find the delay setting on your sequencer. In Notator there is a Delay parameter in the Track Parameters box. In Cubase it is in the Inspector and in Breakthru you can use the Alter Event Times function available from the Track menu.

In Logic it's in the Playback Parameters box although you can, of course, create delays using the Delay Line tool in the Environment window. In fact, Logic's Delay Line alone lets you create many of the effects we'll be looking at here.

Echo on

We'll start by creating some echoes. Record a music line to experiment with. It doesn't want to be too busy – try a combination of eighth and quarter notes, for example.

Create a ghost track of the part on another track (see the ghost tracks panel for details) and experiment with various delay settings. Try 1/8, 1/16 and 1/32 note delays.

Now we get to the interesting bit. Natural echoes decrease in volume so

reduce the volume of the ghost track a little. If your sequencer doesn't have an easily-adjustable volume parameter, use velocity which has a similar, although not always identical, effect.

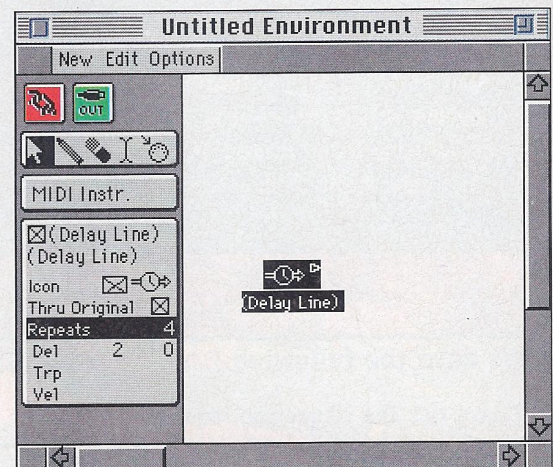
What about creating a ping pong effect? Create a second ghost track, reduce its volume and delay it by slightly more than the first one. If you want evenly-spaced echoes, try delays of 1/32 and 1/16 notes, for example. If you don't want even echoes try something like 1/32 and 3/64 notes or 1/8 and 1/64. You can, of course, use values which have no relation at all to note durations.

Now pan the three tracks to different positions in the stereo image. You could put the main line in the middle and have echoes occurring either side of it or you could place it to one side and have the echoes travel across the stereo field. This is particularly effective with percussive sounds.

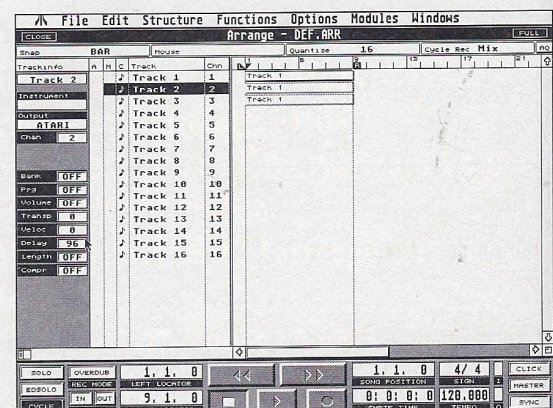
Of course, you can add even more echoes. The main limiting factor – apart from good taste, whatever that may be – is the polyphony of your equipment.

Multi echoes

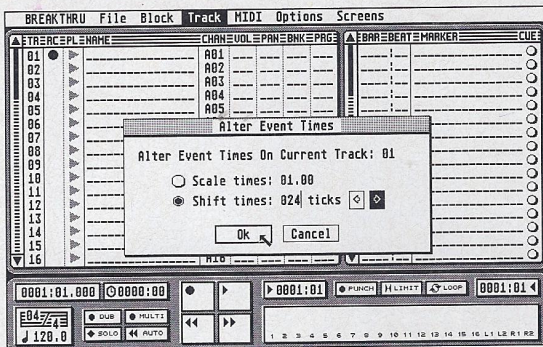
Another idea you can try is to use a different sound for each of the echoes. For example, try a bell or chime echo on a piano line or a vocal echo on a string line. You could create a four or five-part echo and use a different sound for each



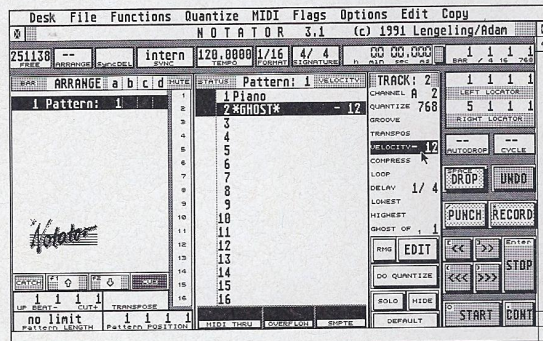
Logic's Delay Line tool can produce many of the effects you can create using delay and transpose parameters in other sequencers.



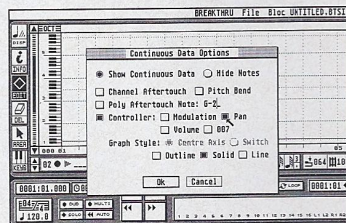
You can find Cubase's Delay parameter in the Inspector.



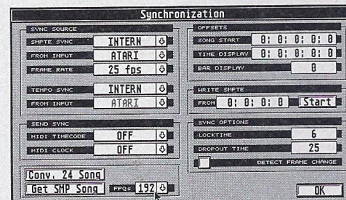
You can create delays in Breakthru from the Alter Event Times window.



Logic doesn't have a volume parameter on the main screen (although you can call up the RMG window) but you can use velocity.

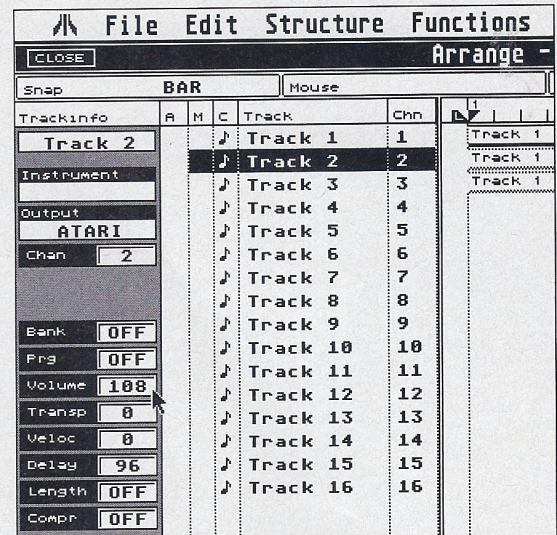


You can set pan values in Breakthru from the Continuous Data Options window.



Cubase's PPQ defaults to 192 although you can alter this from the Synchronisation window.

You can easily adjust the volume of a track in Cubase with the Volume parameter in the Inspector.



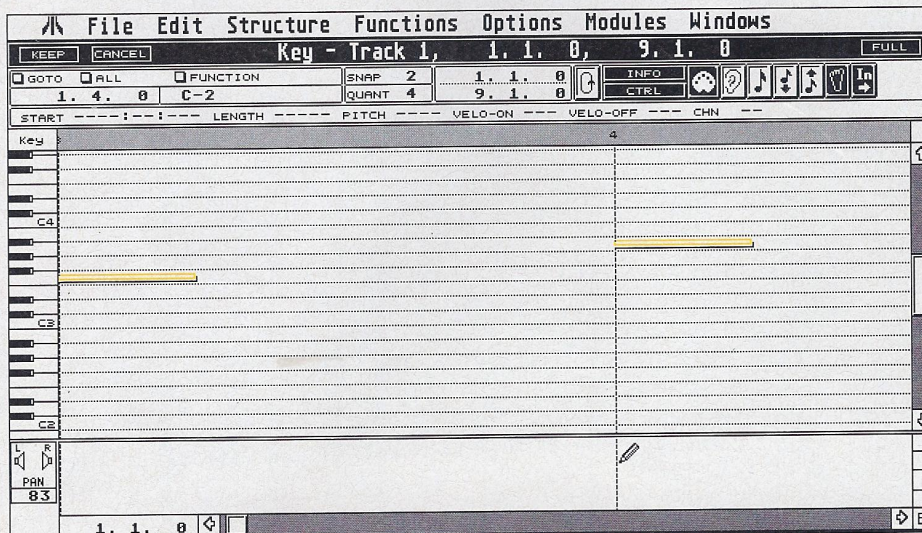
one. Coupled with the ping pong effect you can produce some truly stunning and expansive effects.

But still we can do more. What about transposing the echoes? An octave up or down will sound interesting with most music lines but you could transpose by a third, fourth or fifth to create a harmony echo.

And why stop there? Transpose the first echo up a third, the second up a fifth and the third up an octave to create a "major chord" echo. Or use other intervals to create any other chord you like.

Finally, try a pre-echo by giving the ghost track a negative delay (got that?). In other words, make it play *before* the main line. This works best with slow-moving lines and you need to be careful with the sounds you use and the volumes of the tracks otherwise the pre-echo will pre-empt the main notes and... well, try it and you'll see.

You can draw pan values into Cubase's Continuous Controller editor.



Ticked off

If your sequencer expresses delay times in ticks (most of them do) you need to know how many ticks make a quarter note and so on. This depends on the resolution of the sequencer so you may have to dig around in the manual to find out or do a few experiments.

With a clock resolution of 192, for example, there are 192 clock ticks per quarter note (often referred to as PPQ or Pulses Per Quarter note). This is Cubase's default value although you can alter it from the Synchronisation box in the Options menu. So, a 1/8 note delay would be entered as 96, 1/32 as 24 and so on.

Logic can display delays in milliseconds which could be useful if you are working to a SMPTE time base rather than a bar and beats format.

Ghost tracks

A ghost track is a copy of a track without any notes of its own! It uses the notes in the original sequence and if you change them there, they change in the ghost track, too.

As ghost tracks don't contain any data, they are very economical on memory. However, you can apply a separate set of track parameters to them including delay and transpose.

To create a ghost part in Cubase you do a copy as usual but instead of holding down the Alternate key, hold down the Control key.

Logic calls ghost tracks Aliases after a similar function on the Apple Mac where Logic was originally developed. In Notator you can create a ghost track using the Ghost Of setting in the Track Parameters box.

If your sequencer doesn't support ghost tracks, you can still perform ghost track tricks. All you do is physically copy a part to another track. It will use a little more memory, however, and bear in mind that if you make changes to the contents of the original part you'll also have to make them to the copied part.

C-LAB

FALCON MK I

The really great news is...

...that the C-Lab Falcon MKI will now start at £799 with a 4meg machine which will be ideal for use with Steinberg's Cubase Score or E-Magic Logic (at twice

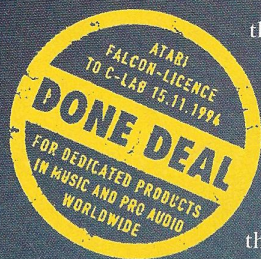
the speed of the ST's) and any other Falcon compatible software. It will also come with a Desk Accessory program which allows the DSP audio circuitry of the

Falcon to be used for stereo effects and graphic equalisation while a MIDI sequencer is running.

Although there is no hard drive in this

computer to record audio to, the computer will still be optimised for and tested with Cubase Audio. All that is needed is a suitable drive and from now on, C-Lab will be supplying their 270meg Syquest drive with Cubase Audio 16 pre-installed and a demo song on the free cartridge. The drive has been tested with both 8 track and 16 track mode in Cubase Audio 16.

For further details, contact your nearest C-Lab dealer or Digital Awareness at the address below.

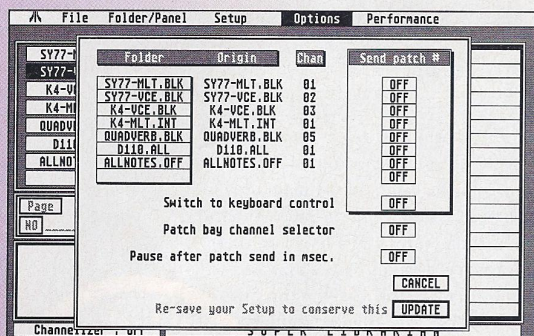


DIGITAL AWARENESS Eurotec House, 31-35 High Road, Chadwell Heath, Essex RM6 6QW, Tel: 0181 598 8081, Fax: 0181 598 8984, Email: digit_aware@cix.compulink.co.uk

A quality exxos scan 01/03/2014

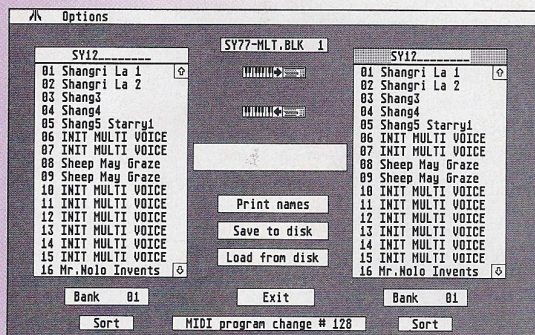
One of the things you'll most certainly want to do is swap sounds or multis between banks. You can do this from the Bulk Organiser page which lists all the voices in a bank or in a multi, for example, although not all dumps can be displayed in this way.

In the Bulk Organiser you can load and save dumps into two clipboard areas and copy items between them. This allows you to create custom banks of sounds sorted by instrument or by music project, for example.



Super Librarian supports MIDI patchbays and can control the routings for each data transfer.

What you can't do, however, is create a multi from a collection of voices by dragging voices into the multi layout. But that's not surprising. Due to the various and sometimes idiosyncratic ways some instruments work, this would be rather difficult to include in a universal librarian although it's a feature a dedicated librarian or editor should offer.

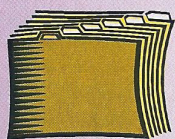


The Bulk organiser can show two lots of voices, multis or other settings at once

High profile

The time may come when you acquire a new piece of equipment and find that there is no profile for it in the Super Librarian. The easiest course of action is to contact the distributors and ask if a profile is available. But if it isn't, you may consider writing one yourself.

Now, I'm not going to say that this is easy because it isn't. You need a pretty decent knowledge of MIDI and Sys Ex messages and you must be able to understand the pages of MIDI Exclusive Data listed at the back of instrument manuals.



Super Librarian has its own programming language called MOS (MIDI Operating System) and there's on-line help for the commands but you still need to be a bit clever with the old hex messages.

DA on arrival

There is a desk accessory version of Super Librarian on the disk which can transmit sounds and settings to a device while you are running a sequencer. It can save a lot of time.

There are also DOS and Mac versions of Super Librarian and a Pixel Link function enables you to transfer data between your ST running Super Librarian and another computer. Useful if you have a mate with a different machine.

Super Librarian also supports programmable MIDI patchbays and you can set it up to control the MIDI routings for data transfers.

The manual is quite friendly and includes a tutorial and although there's no index, the chapters are pretty well organised so this is not as drastic an omission as it could have been.

Incidentally, I tried Super Librarian on a Falcon and although some sections of it seemed to work, it had problems with pathnames when trying to install profiles into the Device Panel. Pressing deadlines did not allow me to investigate further but if you're a Falconite it may be worth having a word with Sounds OK.

Verdict

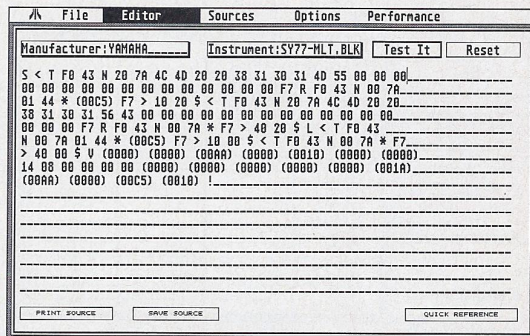
Super Librarian is easy to use and has profiles for over 100 instruments. However, although Pixel claims to be supporting the program with additional profiles, the distributor was not able to

Use arrows to scroll	*** View Buffer ***	[Byte] [Nibble] ESC to quit
00000 4C 4D 2B 2B 38 31 30 31 4D 55 00 00 00 00 00 00	SY77-VCE.BLK VOICE1	LH 8101MU.....
00010 00 00 00 00 00 00 00 00 00 20 20 53 68 61 6E		 Shan
00020 67 72 69 20 4C 61 20 31 20 20 20 20 20 20 01 00		gri La 1
00030 64 64 01 01 01 01 00 64 64 08 08 08 08 64 64 64		dd,dd,dd,dd
00040 18 06 30 09 64 64 19 19 30 01 01 00 00 00 00 00		..0,dd,0,dd
00050 00 00 00 00 43 02 37 58 40 40 20 43 00 16 7F 40		...C,7X00 C,de
00060 20 40 43 01 3E 64 40 40 20 43 02 34 64 40 40 20		C,de C,4000 C,de
00070 43 01 01 64 40 40 20 43 00 64 64 40 40 20 43 00		C,de C,de C,de C,
00080 03 64 40 40 20 43 00 35 4A 40 40 20 43 02 2F 64		de C,5000 C,d
00090 40 40 20 43 00 0C 64 40 40 20 43 00 1F 64 40 40		ee C,de C,de C,
000A0 20 43 00 10 64 40 40 20 43 00 7F 40 40 20 43 00		C,de C,de C,de C,*
000B0 00 27 64 40 40 20 43 00 2F 64 40 40 20 43 02 2A		de C,de C,de C,*
000C0 64 40 40 20 20 20 40 40 20 20 38 31 30 31 40 55		de C,de C,de C,
000D0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 01		
000E0 20 20 53 68 61 6E 67 72 69 20 4C 61 20 32 20 20		Shangri La 2
000F0 20 20 20 20 01 00 64 64 01 01 01 01 00 64 64 08		dd,dd,dd,dd
00100 08 08 08 04 64 64 18 06 30 08 08 64 64 1E 20 24 01		dd,dd,dd,dd
00110 01 00 00 00 00 00 00 00 00 00 43 01 3E 58 40 40		...C,de C,de C,
00120 20 43 00 18 7F 40 40 20 43 01 3E 64 40 40 20 43		C,de C,de C,de C,
00130 02 34 64 40 40 20 43 01 64 40 40 20 43 02 15		de C,de C,de C,
00140 6E 40 40 20 43 00 03 64 40 40 20 43 00 35 64 40		nee C,de C,de C,
00150 40 20 43 02 2F 64 40 40 20 43 00 35 64 40 40 20		de C,de C,de C,
00160 43 00 29 64 40 40 20 43 00 10 64 40 40 20 43 00		C,de C,de C,

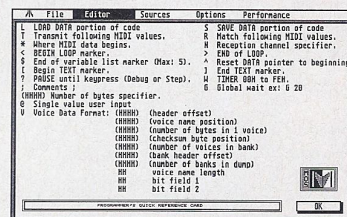
If you're really keen you can checkout the View Buffer and see the MIDI data in all its native glory.

confirm a full list before we went to press. It will be as well to check what profiles are available before buying.

The program could be improved in a few areas – a feature to assign voices to categories would be useful for finding certain types of sound, for example – but it generally does a good basic job without fuss.



You can create your own profiles in the editor – with a little bit of know-how.



The profile editor has an on-line help screen showing the various commands you need to create a profile.

PUBLISHER: Pixel Publishing
UK DISTRIBUTION: Sounds OK
Tel: 01276 22946
Price: £79.00 inc. VAT

Requirements: Any ST or STE • colour or mono monitor, double-sided disk drive.
Pros: Easy to use • not copy-protected • supports MIDI patchbays • includes a DA
Cons: Pushing the price for an ST program • lacks a few frills

SCORE: 6

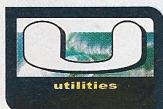
Public Arena

There's little doubt that some of the best ever ST and Falcon programs have appeared as either public domain, shareware or free ware. *Public Arena* brings you reviews of the best programs and games, month in, month out – and our 10 point marking system guides you effortlessly through the decision of whether to buy or not.

Reviews by Nial Grimes, Joe Connor, Denesh Bhabuta and Carl Lofgren.

OCR

Goodman International •
£1.95 • ST/Ste/Falcon



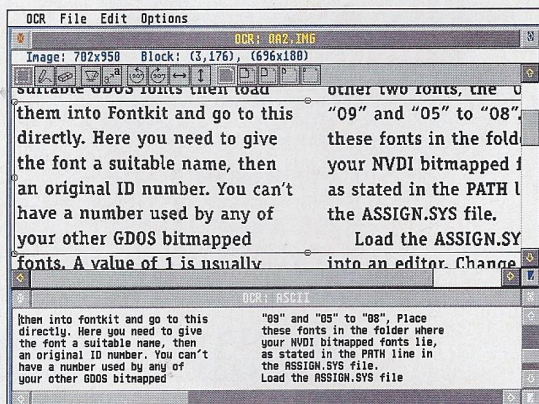
Optical Character Recognition (OCR) is the process used to convert scanned text into editable ASCII text. Before OCR can

recognise text training mode must be used to build up a database for each font which can be edited and stored for future use. Success entirely depends on the quality of the scan combined with the size and style of the font. Near 100% accuracy is possible at 10 point fonts and above when scanned at 200 dpi.

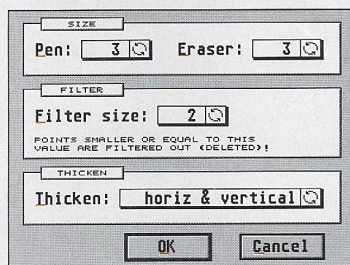
New since the previous OCR release, reviewed in Issue 1, version 1.4 offers image pre-processing tools and built in text editor functions.

The image window features an icon toolbar with help from which the new tools can easily be accessed. From left to right the tools are, selection frame, pen, eraser, filter, thicken, anti-clockwise rotate, clockwise rotate, horizontal mirror, vertical mirror and five preset image scales.

The Filter tool removes pixel garbage below a preset diameter and feeble scans can be beefed up using the Thicken tool. Thickening can be applied in any direction but horizontal thickening helps improve recognition for fonts where characters are prone to growing apart. Every scanner owner should have a copy of OCR handy - it's freeware so there's no excuse!



Before and after, text from an Atari World Q&A converted to ASCII.



A new tools dialog sets the defaults for the Pen, Eraser and Thicken tools.

Let 'Em Fly

Goodman International • £1.95 • ST/Ste/Falcon



Let 'Em Fly is a special utility that you won't be able to live without once you've used it because it



adds so many extra features to GEM dialogue boxes and alert boxes. Let 'Em Fly assigns keyboard shortcuts to buttons in dialogue boxes, which can be indicated by an underscore or a coloured character, so you can navigate through programs and operations much faster.

These and other options are fully configurable via the supplied CPX module or accessory.



Alert boxes are much nicer looking with Let 'Em Fly, and both dialogue and alert boxes can be dragged around using the mouse.

A typical GEM dialogue box with Let 'Em Fly installed.

Let 'Em Fly 1.2 introduces an extended editor for editing text fields in dialogue boxes, allowing you to select special characters. Dialogue boxes can be moved around in various ways and boxes can be made to snap to the mouse pointer: useful if you are using a large virtual screen.

If you want to enhance your STs interface, then place Let 'Em Fly in the AUTO folder. What's more, it's free



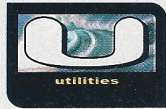
The Let 'Em Fly configuration accessory.



MasterBrowse



Floppyshop • £2.00 • ST/Ste/Falcon

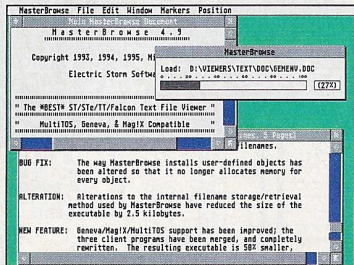


We all read text files on the ST at some time or another, especially when we're experimenting with PD programs that come with documentation in the form of text files on disk.

The Show/Print/Cancel dialogue is fine for short files but how many times have you been reading a long file and needed to refer to a paragraph you've just passed? Or even mistakenly pressed the space-bar twice? Back to the beginning of the document we go.

MasterBrowse is a fully featured text viewer. It features fully scrollable windows, allowing you to move up and down the document. MasterBrowse also gives you comprehensive search functions, a powerful printing option, batch file processing and allows you to manipulate blocks in many different ways.

MasterBrowse makes full use of GEM. Text loading and displaying is very fast and can be displayed in any installed GDOS font. It is shareware and costs £14 to register, which also entitles you to five other registered programs by the same author, one of which is ESS-Code. If you read a lot of text files, then MasterBrowse is an essential utility.

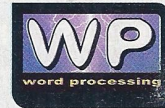


Masterbrowse in medium resolution.



InsChar and InsDate

Floppyshop • £2.00 • ST/Ste/Falcon



If you've ever found yourself a few characters short of a full set or regularly need to type the date manually this pair of desktop accessories programmed by Mathew Carey, the Fonty author, should

come in handy.

InsChar inserts any character from the ASCII table into the text at the current cursor position, as if it had been typed on the keyboard, and InsDate does the same with the date.

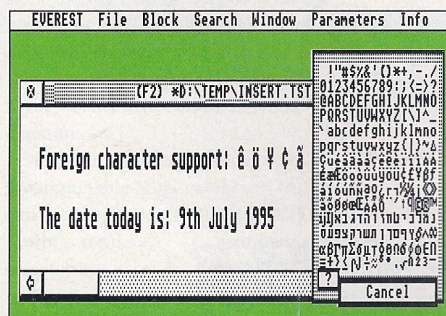
Compatibility with most popular text crunchers is good and a user definable dummy scan code value can be entered to overcome problems with a few oddball programs.

Using Insdate only makes sense if the system date is set correctly so unless your system has a battery maintained clock it's important to set the system time using XControl or boot utility at the start of each session.

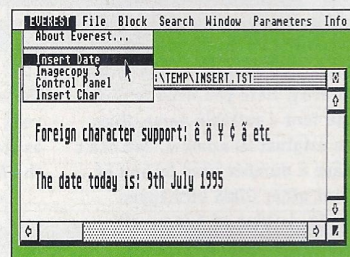
With a system limit of six accessories it's easy to run out of free slots and small utilities like this pair are ideal candidates for use with Chameleon or Multidesk.

InsDate adds the system date into your text, any time, any place, anywhere.

Masterbrowse shows a progress display and text and background colours can be set as you like.



InsChar makes it easy to access the entire character set.



Text Analyser

Floppyshop • £2.00 • ST/Ste/Falcon



So you think you've got what it takes to be a writer? Interested in getting an objective opinion? If you're prepared to face the verdict of a mere computer program (so you got a low rating eh? — Ed)

then load up a file and set Text Analyser into action.

Sit back as your masterpiece is ripped to pieces before your eyes and scrutinised by the nasty sounding FOG and Flesch readability calculations. The result is displayed as an American high school grade.

The docs don't explain any of the theory involved so a few words of explanation are in order. The FOG index is a measure of the 'fogginess' of the text, the higher the value the

less readable the text. The Flesch index indicates the percentage of the population capable of understanding the text and is reputed to be the more reliable of the two methods.

You're still on your own with the American year grades because I haven't the foggiest!

Despite the primitive interface, the useless documentation and inability to save the results (apart from screen grabs) it's still irresistible to compare your texts with those from other sources. The word count is useful and provides a convenient excuse to run the program.

Desk	File	Quit
Text Readability Analyzer		
D:\REF\GRANDPRI.TXT		
Total letters :	5789	Character being read :
Total syllables :	2129	
Total words :	1405	
Total sentences :	93	
Avg letters/word :	4.1	FOG Index Score :
Avg syllables/word :	1.5	10.2
Avg words/sentence :	15.1	Flesch Index Score :
Words with 1 syllable :	876	64.5
Words with 2 syllables :	383	Grade 8-9 (Jr. High)
Words with 3 or more :	146	

Inexplicably, American junior high school students prefer Murray Walker's quotes to my copy!



STNEWS Vol 10 Issue 1

Goodman International £1.95 • ST/Ste/Falcon



STNEWS is a disk magazine compiled by Richard Karsmakers, best known for his UVK virus killer utility. This issue covers

everything from reviews of other disk magazines, through reviews and previews of Atari software to heavy metal music which Richard is evidently into.

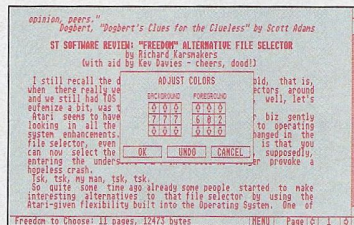
In one of Richard's reviews he commented "I hate reviewing disk magazines because they usually amount to a summary of what's in them" so I'm trying hard to avoid that trap! The look and feel of a disk-based mag is vitally important as it sets the tone and in this department STNEWS is boringly GEM standard.

Richard himself admits STNEWS "isn't the best looking magazine around" but happily STNEWS has other redeeming features. The best feature is undoubtedly the silky smooth text viewer which includes useful options to print or save the text in ASCII or First WordPlus format. Amazingly not a single image is used anywhere in the mag which seems crazy, when they're only a screen grab away!

Reading the articles on-screen wasn't as tedious as I expected and after wading through a few hard nosed articles in *Atari World*, the couldn't-care-less writing style in STNEWS makes a refreshing change. Any Atari related reading material has to be worth a look doesn't it?



The GEM lookalike cascade menu system is intuitive and well organised.



Select your colours, ramp up the soundtrack and check it out!

PICFIB

Floppyshop • £2.00 • ST/Ste/Falcon



PICFIB, an acronym for Picture File Browser, is yet another slideshow utility designed to display images in turn. There's not much scope for originality in this genre and the differences between

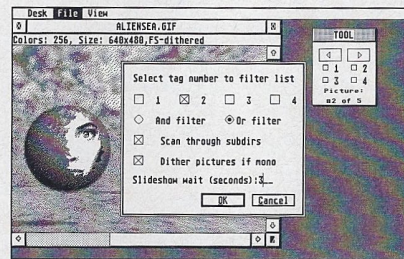
packages are limited to which image formats are supported, how image sequences are controlled and how well they do their job.

PICFIB supports images up to 4096 by 4096 pixels in Degas, IMG, PCX and GIF formats. Up to 256 colours can be displayed and colours are dithered in mono resolutions.

The slideshow is controlled using an ASCII text file which is automatically created after selecting a target path and filetype, and can optionally scan subdirectories. Four 'tags' can be used in conjunction with 'filters' to control which files are displayed. The first tag indicates whether the image has previously been displayed and skips to the next image if it has. This comes into its own browsing large numbers of clip art. The other three tags are user definable, and can be used to group images into topics and so on.

Images are displayed one at a time in a window but the options are limited. For example it's not possible to select an individual frame in a sequence or change the palette to display menu entries which have been rendered invisible! PICFIB is shareware and registration removes a limit of ten

entries in the tag lists.



PICFIB's mono dithering performs better than its colour image handling.



Lottery Companion

Goodman International • £1.95 • ST/Ste/Falcon



Lottery Companion is a powerful application aimed squarely at serious lottery players which makes a pleasant change from the deluge of halfbaked utilities which followed the launch of the lottery.

The database maintains a complete record of the previous draws and this data is used by the programs' automatic number selection options to select 'hot' and 'cold' numbers. Up to 1,000 sets of numbers can be handled which should be enough for even the largest syndicate!

Any screen display can be output to disk or printer using the Print or Save hard copy options in the File menu. At 8:04 on Saturday night, as the family huddles round the TV, you enter the numbers as they're drawn. You wouldn't even have to wait until the results are "sorted for your convenience" because Lottery Companion handles this automatically and you'll know immediately how much you've won - or not!

Lottery Companion, programmed by Mark Butler, is shareware and costs £5. Registration removes the nag prompt and includes a copy of the latest database and six months' support.



Use the comprehensive stats features to see where your money went!

The Wheel option generates every permutation for a fixed set of numbers.



ESS-Code

Floppypshop • £2.00 • ST/STe/Falcon

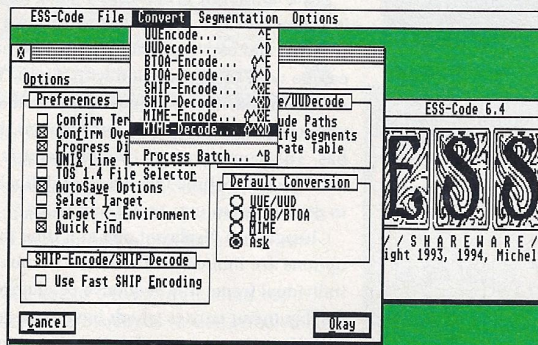


You can connect onto the Internet to send e-mail, upload and download files using your ST. But you can't send binary data such as files via e-mail over the networks because they don't support the exchange of binary data. The binary file needs to be converted to an ASCII file, and then converted back to its original state after transmission.

ESS-Code, a shareware program, allows you to convert between binary and ASCII, using four different ASCII-Encoding methods of UU, MIME, BTOA and SHIP. These methods are widely used on the Internet. Some services don't allow the transmission of files over a certain size via e-mail and ESS-Code can split these up into smaller chunks, and rejoin any that you receive.

ESS-Code encodes and decodes at blistering speed. Sporting a non-modal GEM interface, it shows a progress display when it is working. Compatible with all TOS versions and multitasking operating systems, it can also run as a TOS program with an archiver shell such as Two-In-One.

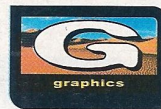
Registration is £14 and comes with other registered programs by the author. For comms buffs it's an essential buy - you'll find you can't do without ESS-Code.



ESS-Code needs ST Medium or higher, giving your e-mail a virtual envelope.

Squirrel

Floppypshop • £2.00 • ST/STe/Falcon



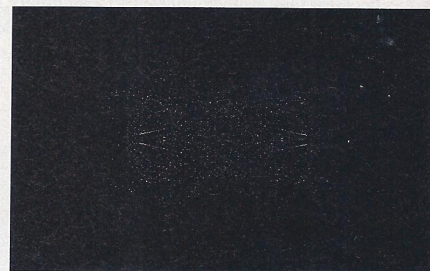
Squirrel is a light pattern generator, much like Jeff Minters' infamous Colourspace program but with more emphasis on the way the mouse is moved. Working in any resolution, you are able to create flowing and constantly changing patterns.

You move the mouse about in any direction, and patterns made up of dots are drawn across the screen. Slow mouse movements produce relaxed patterns, whereas fast mouse movements produce "excited" patterns, with a mouse accelerator giving a more sensitive display. Your mouse controls four points which all move at the same time.

Squirrel includes many keyboard configurable options, which can be changed while running the program. These allow you to set the chaser and trailer lengths, as well as toggle

which of the four points you don't want. Creating patterns like this is a doddle with Squirrel.

The program is intriguing at first but becomes a little tedious after a while — even in low res you only get green on a black background. If this type of thing interests you, then switch off the lights, play that Pink Floyd album and start squirling!



ImCon

Goodman International • £1.95 • ST/STe/Falcon

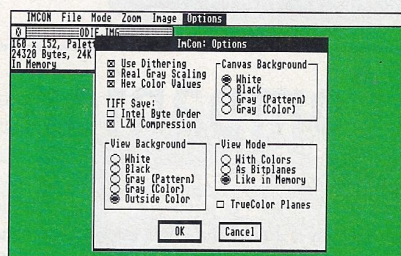


There are many image formats, most which you can view on your ST as long as you have the appropriate programs. However you are stuck if you have an image in an obscure format and need to include it in a DTP or word processor document. This is when image conversion programs come in handy.

ImCon is a freeware image conversion program. As well as allowing you to view the images, it comes with a small set of image processing tools such as blur, invert, zoom and dither. You can even edit the palette of a picture. The interface is the familiar GEM and image viewing is very fast compared to some other PD image viewers.

The image formats supported by ImCon include the Atari specific ones like Doodle, Degas, Neochrome, Tiny, Art Director, Spectrum 512, Atari Image Manager, and GEM IMG, through to Amiga IFF, PCX and industry wide GIF and TIFF. My only gripe was the exclusion of support for JPEG which is becoming a very popular format now.

ImCon works very well and comes highly recommended.



ImCon comes with quite a few configurable options.

ImCon is displaying this in 16 colour mode on a Falcon.



Timmy's Tree Designer

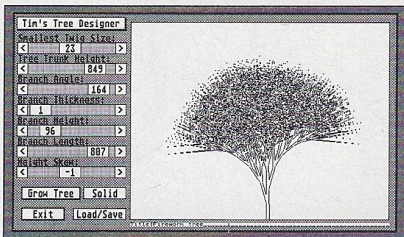
Floppyshop • £2.00 • ST/STe/Falcon



Timmy's Tree Designer is a simple fractal and genetic algorithm program. It allows you to design trees to while away the odd spare moments that crop up. Trees are drawn recursively and parameters for various options are controlled by sliders. A "baby" tree is plotted in the sample window according to your settings, giving you an idea of the way the tree will grow. Click on Grow Tree and a fully grown tree is plotted. It can either be viewed with or without leaves.

You can adjust the size of twigs, trunk height, branch angle, length, thickness and height, and how far you would like the tree to skew. Various parameters can be saved to disk and example trees are provided for you to grow and view. Growing trees couldn't be simpler!

The program works in ST high res and above and only displays trees in mono. It is multitasking friendly with everything set and displayed in a window but that doesn't broaden its appeal. Timmy's Tree Designer is only likely to appeal to children. If you're into genetic algorithms, you could do better with almost any alternative.

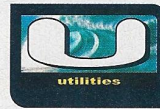


Any guesses why this one is called a Firework Tree?



Modest

Goodman International • £1.95 • ST/STe/Falcon

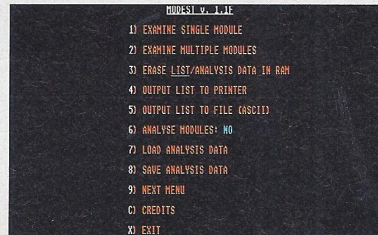


Keeping track of all modules in your collection is a time consuming and very boring task. Modest is a module organizer from Denmark, designed to make the work a whole lot easier for you, by compiling a list of all your modules with their respective filenames, songnames and any other information that's available. One very useful feature is that you can let Modest search through your library for unwanted duplicates.

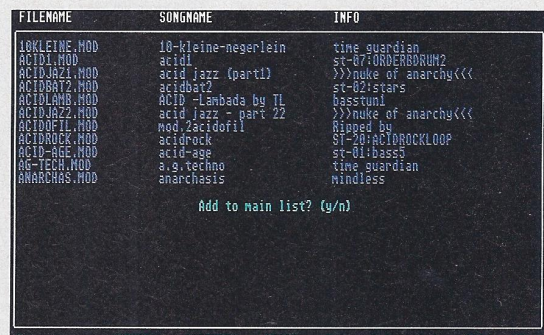
The interface is everything but exciting. It isn't a GEM application

and it runs only in medium resolution. A minor drawback is that Modest is limited to modules with a maximum of four voices.

Modest is shareware, and many important functions are disabled in the unregistered version. It costs only £8 or so to register and it will certainly do the job.



Not the most exciting interface around...



Some new entries about to be included in the list.



Dump It!

Goodman International • £1.95 • ST/STe/Falcon

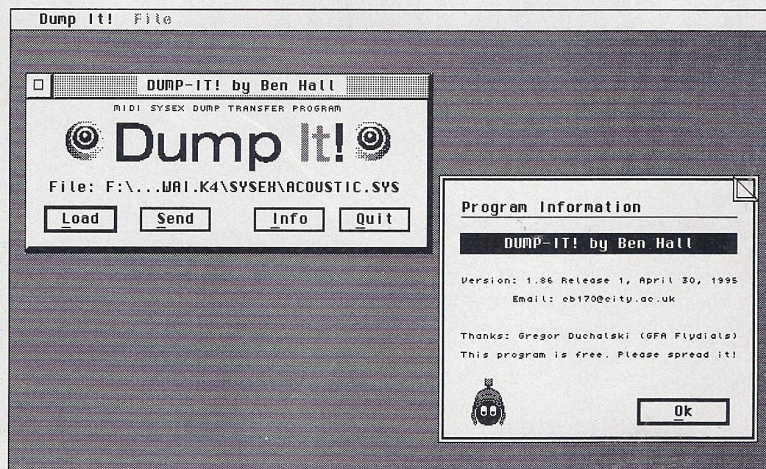


SysEx (short for System Exclusive) is data dumped from a specific MIDI device. Usually SysEx data contains synthesiser sounds, but it can also contain data such as drumsets, MIDI set-ups, system parameters and so on. The idea behind a SysEx handler is to eliminate the need for those expensive synthesiser RAM cards, by saving the data to a floppy disk instead. Perhaps not as convenient, but a far more cheaper solution!

Dump It! written by Ben Hall, is a freeware SysEx handler capable of loading and sending SysEx data. The program itself requires about 40K. It runs in any resolution and works both as an accessory and as a program.

Usually SysEx handlers provide the user with the options to receive and save data. The lack of these two options makes Dump It! feel very incomplete, which really is a shame, as otherwise it is very nice and easy to work with.

Loading and sending synthesizer patches is a breeze with Dump It!



Square Off

Goodman • £3.90 • 1Mb

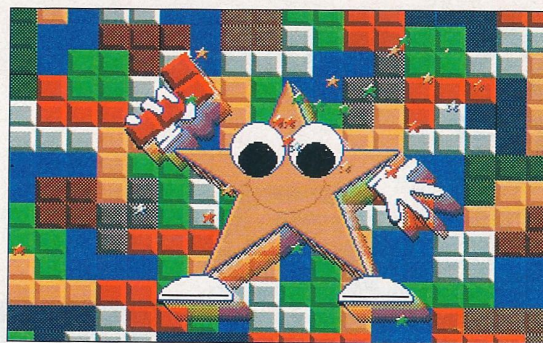
ST/STe/Falcon

Dave Munsie is well known for revitalising old games and his latest creation is a revamp of our old friend Tetris.

Although the concept may be hackneyed, a lot of effort has obviously been put into making Square Off as impressive as possible and the whole thing screams sophistication.

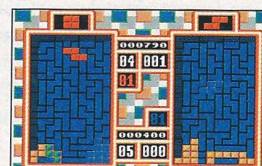
Clouds of stars float across the intro screen while cutesy music blares from the speakers and the in-game effects are equally luscious – pieces sparkle as they fall into place and the play area shudders as a line disappears and piles of blocks tumble downwards.

Gameplay hasn't been forgotten either – the scenery changes every couple of levels and you can also choose between classic, arcade or battle (two-player) modes. The latter option is a real blast, because some of your cleared lines

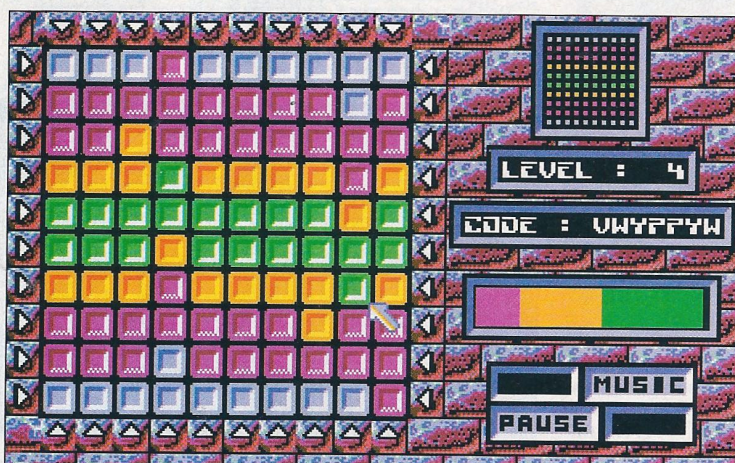


Trendy presentation and excellent visual place Square Off head and shoulders above other Tetris clones.

automatically appear on your opponent's screen! Despite my initial reservations, Square Off is an excellent game. Try it – you *will* like it.



The Tetris gameplay is relatively untainted, but Square Off adds unique extras, such as a "battle" mode!



A code system allows you to jump to any level, but the font used is a bit tricky to read.



Tegula

Goodman £1.95 • ST/STe

Tegula is a straightforward puzzle game that places you in control of a coloured grid (control yourselves, please!) The ST jumbles up the pieces and it's your job to slide the lines back into position, with the help of the "key" at the top of the screen. Needless to say, the first few rounds are a piece of lemon meringue pie, but the patterns soon become more complex and the level of "reorganisation" needed escalates quickly too. A code-word system ensures that things never get too frustrating and effective presentation backs up the uncomplicated gameplay – even the chip-produced music is relatively inoffensive.

Tegula may not be the most exciting brain-teaser ever released, but it's moderately addictive and does contain a good hint of originality; a quality that counts for a lot when it comes to shareware games. And all for just a fiver too!

The World at War

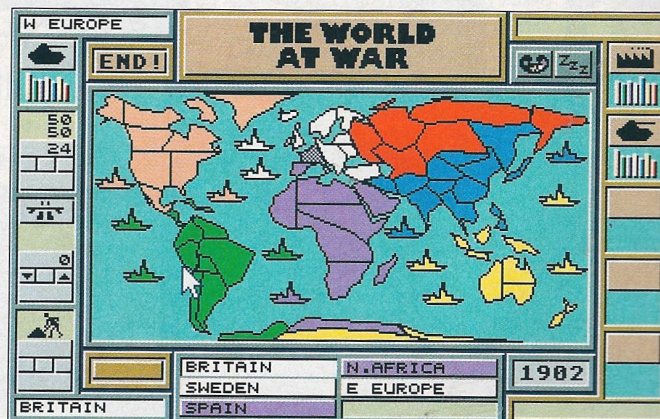
LAPD • £3.00 • ST/STe/Falcon

The World At War is essentially Risk with brass knobs on. The aim of the game is world domination (no less) and to achieve that goal you'll need to juggle your numerous battalions from frontier to frontier, defending or attacking as necessary. Battles can be waged against the computer, or you can link up a number of machines in a multi-player scenario.

Full documentation is included on the disk and you'll need it because the interface is quite difficult to use, reflecting the complexity of the game itself. Come back Powermonger, all is forgiven!

While undoubtedly well presented, The World at War is quite a slow game and probably best suited to strategy fans. However, once you get used to the idea that Laurence Olivier isn't going to pop up with a narration of events, it's playable in a "whoa – look at the size of my Risk campaign diary" sort of way.

Strategic use of industry and armies will lead you to world domination – ah, the power!



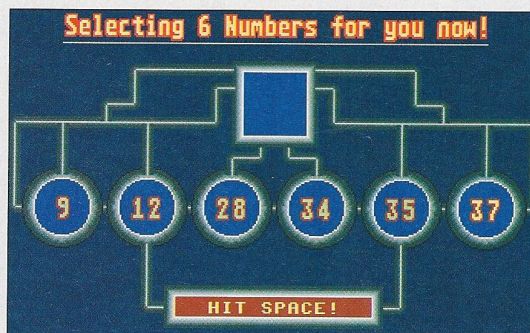
Lottery Number Cruncher

Floppyshop • £3.00 • ST/STe

This is the sort of program that computers were made for! Yes, Lottery Number Cruncher is designed to ease the huge burden of choosing numbers for the "it could be you... dream on pal" National Lottery.

It picks six totally random numbers between 1 and 49 and pops them up on the screen, using suitably dramatic sound effects and music where necessary. All the author asks in the way of a registration fee is that you remember him when (or should that be "if") your numbers come up – a postcard from your yacht moored off a small island in the Bahamas will probably suffice.

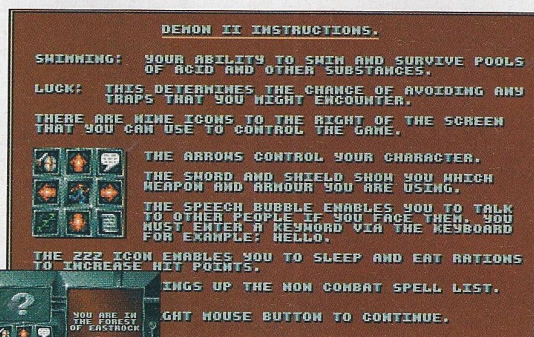
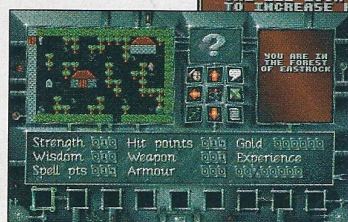
The funny thing is, watching those dials spin round is at least twice as exciting as the actual Lottery programme and you don't have to wait until the weekend to rip up your ticket in disgust. What next? Digital scratch cards?



Feel free to bump up the rating to ten if the above numbers come up this weekend



The icons are all explained in the on-line tutorial, but most of the functions are fairly obvious.



The view screen is rather small, but Demon includes all the ingredients of a good role-player.



Demon II

LAPD • £3.00 • ST/STe

Demon II is a good example of the overhead role-playing genre. As usual, the aim is to wander around cutting up monsters and buying goodies in the hope of finding out what on Earth you're supposed to be doing somewhere along the way. The game offers a choice of six characters, each with their own skills and movement around the view screen is accomplished via an arrow panel.

Comprehensive on-line help explains all of the other icons clearly and it's easy to pick up what button does what given a little role-playing experience. Although small, the graphics are quite nicely detailed and digitised sound effects are used liberally. In fact, if you can excuse the slightly Lilliputian screen display, Demon II has plenty to offer the RPG fan in the way of monsters, atmosphere and eerie sound effects. As such, it's ideal for restless Nethack players.

Tautology

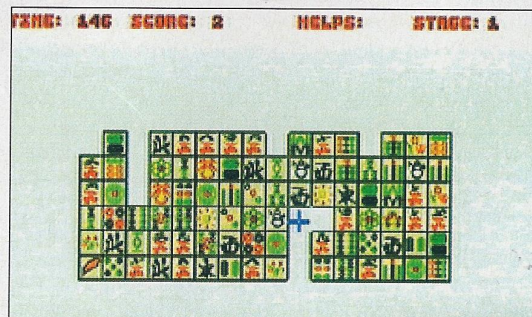
Floppyshop • £2.50

• Falcon only

Tautology takes a sedate but classic board game and turns it into a fast-paced arcade experience. The donor game is Shanghai and the idea of this reworked version is still to match symbols, but the enormous mound of tiles has been replaced with a more manageable, two-dimensional rack.

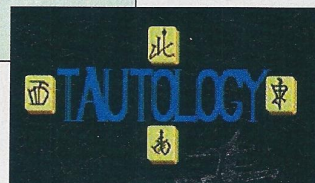
Matches are only possible when pieces are "exposed" and a Lycra-tight time limit adds to the tension. If you do get stuck, you can prod the "Help" key but three tips is the maximum per game. Meanwhile, beautiful background music soothes away some of the frustration and reduces the effect of the rather clumsy graphics.

Overall, Tautology is a rather enjoyable outing. Music aside, it's not quite as well presented as the remarkably similar game which forms a part of the Syntax Terror demo, but at least it runs on the Falcon. I think I'm hooked, again.



Tautology is easy to play, but you're gonna need demon reflexes to beat the damn time limit!

Tautology – needless repetition of an idea, statement or word. Just thought you'd like to know.





Feel Like Makin' Web

Alexa Robinson and Graeme Rutt get clicking on the Web...



Here is my single picture of buttons. In this case created with DA's Vector and converted to Targa format. The next step is to use Imagecopy to convert to an interlaced, transparent gif.

ISMAP is the term that qualifies an image as 'multi' clickable, rather than an icon that clicked will follow just one link. An ISMAP allows you to define a different route for any click, anywhere on the graphic.

The biggest advantages of this Web function is the ability to combine a series of buttons for a menu, that will all download as a single graphic. Any of you out there already using Chimera, will know what I mean!

In my example, eight buttons are available in one 5K interlaced, transparent gif. All aligned, and with the BORDER option set to 0, they appear to be separate elements. If on the other hand, I cut each one out as a separate gif, making sure of the size to guarantee uniform layout, I would have produced 13K worth of 8 little GIFs!

Back to that BORDER tag for a moment, the entire picture, transparent or not, will have a border, not each link you define. I chose the value of 0 because I want to eliminate this altogether for my example – but be aware, not all browsers recognize this tag.

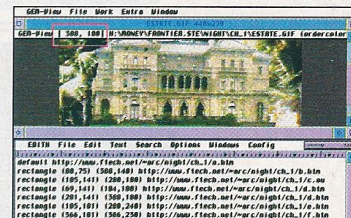
Again using the example, I have the choice to make just the button access my link, or a larger rectangle that also includes the word associated with it.

Every clickable image contains an error message, designed by you, the author. So if you want to insist on a click right on the button, you can say so in your error message.

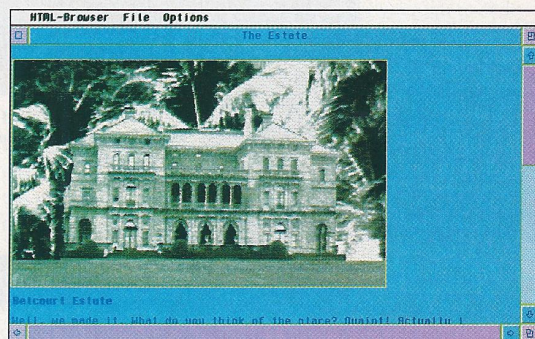
There are several art packages available for Atari, that clearly show you the coordinates of each pixel of the picture, but my preference is GEM-View. Often I crop my designs, therefore I prefer a package like GEM-View, for after all other work is done.

For MultiTOS users, the whole process is further simplified, by opening GEM-View in one window, and your word processor, Edith in my case, in another. Clicking back and forth between windows gives me the quickest process for creating my ISMAP maps. Of course, each of these can be used as desktop accessories in much the same way or there is a highly technological development called pen and paper for noting the coordinates down!

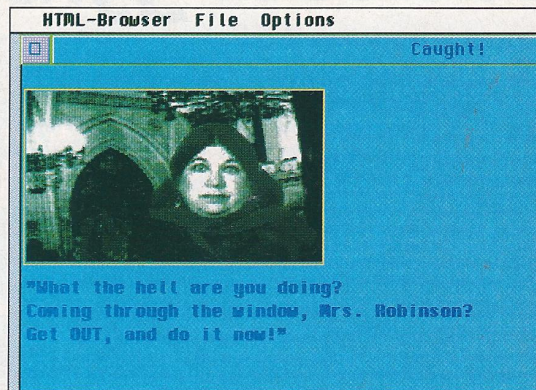
At first, ISMAP coding may seem a bit daunting, and there is nothing short of setting up your own server to test your results offline, but from an experienced user, the learning curve is short and quick once you get the hang of it and the rewards are enormous!



MultiTOS can make the entire process a lot simpler but is not essential.



Although ISMAPs cannot work independent of a WWW server, using an application called HTML.APP, you can get an idea of how pages will look. The picture of the estate is in my on line mystery...



Tagging my estate picture as an ISMAP now means that if the viewer tries to enter through the wrong place they will get thrown out! Another area links to a blood-curdling scream.

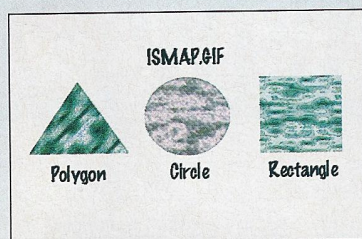
Leading by example

The clickable image is the first example we're going to show you of a CGI script (see boxout) in HTML coding. We don't – thankfully – have to worry about the make-up of the script. Instead we need to deal with the HTML coding necessary to interface to the script in the correct fashion.

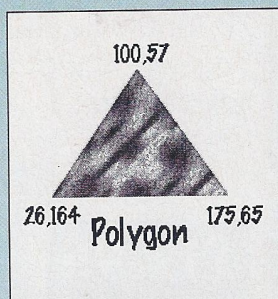
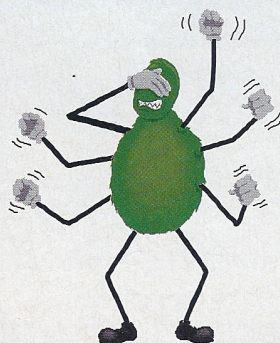
This consist of two pieces of information. The first is the format of the anchor command. As with most anchors we use the `<a href=>` tag but the contents of the tag are slightly different. The link points to a map file (extender *.MAP) and the anchor is the clickable image itself: This consist of two pieces of information. The first is the format of the anchor command. As with most anchors we use the `<a href=>` tag but the contents of the tag are slightly different. The link points to a map file (extender *.MAP) and the anchor is the clickable image itself: `<a href="/htbin/htimage/ismap.map"></a>`

The 'htbin/htimage/' path is one way that different servers talk to CGI scripts – you must ask your service provider which to use. Also note the 'ISMAP' option – this tells the browser to send the pixel co-ordinates along with the hyperlink request.

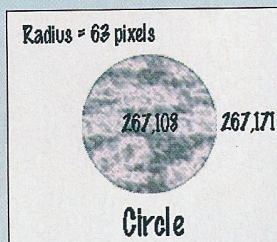
The second piece of information is the format of the MAP file. There are actually two formats (CERN and NCSA) – again ask your service provider which to use. The basic idea of a MAP file is to list a number of 'hot-spots' with links to other HTML pages. This is done using co-ordinate pairs to describe polygons, circles or rectangles.



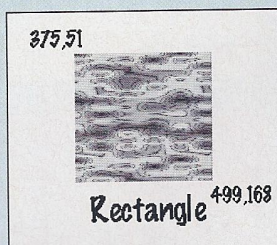
Our demonstration image, with a polygon, circle and rectangle.



The poly command.



A circle.



The rect command.

In CERN format the 'poly' command is followed by a list of co-ordinate pairs, in brackets, denoting each 'point' of the polygon and then the HTML page to call:

```
poly (100,57)(175,165)(24,164)(100,58) polygon.htm
```

In NCSA format the HTML page comes first and is followed by a list of co-ordinate pairs, without graphics.

```
poly polygon.htm 100,57 175,165 24,164 100,58
```

In CERN format the 'circle' command is followed by a co-ordinate pair for the centre of the circle, the radius of the circle and the page to call:

```
circle (267,108) 63 circle.htm
```

In NCSA the HTML page comes first, followed by the co-ordinate pair for the centre and then a co-ordinate pair for the rightmost edge of the circle:-

```
circle circle.htm 267,108 267,171
```

In CERN format the 'rect' command is followed by the top left co-ordinate pair, the bottom right co-ordinate pair and then the page to call:

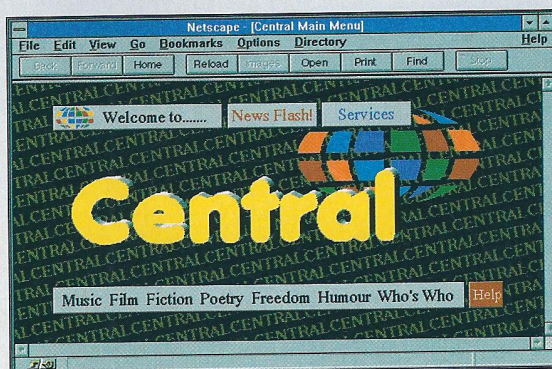
```
rect (375,51)(499,168) rectangle.htm
```

With NCSA, again, the page comes first followed by the same data (sans brackets):

```
rect rectangle.htm 375,51 499,168
```

Naturally all of these can be mixed together in your MAP file and there's no limit as to how many different shapes you can have. You should note that there is another important command that `<I>has</I>` to appear in your MAP file – 'default.htmlpage.htm' is the link that the CGI script calls if the user doesn't click on any hot-spot.

That's it for this month. Next month we'll be rounding off the series - happy web weaving!



A clickable image that serves as a graphical main menu.

CGI Scripts

Clickable images are made possible by CGI scripts. Such a script is a program which is run when necessary by the server to provide user interaction over and above what is possible with normal HTML code.

The ISMAP CGI script takes user input (in the form of mouse co-ordinates), processes that input (finds out on which part of the image you clicked and compares it with your MAP file) and then outputs a new HTML page.

Another example would be a search form – the form is filled in, processed and then the results are sent back. The CGI script itself is written in any language that can run on the server. Probably the most popular language for this is PERL, which is a (very) high level language available on most platforms – from the Atari to UNIX machines.

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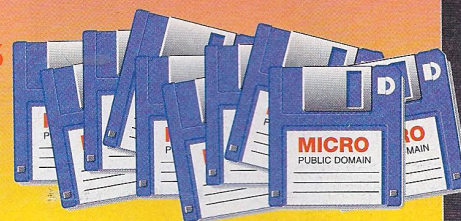


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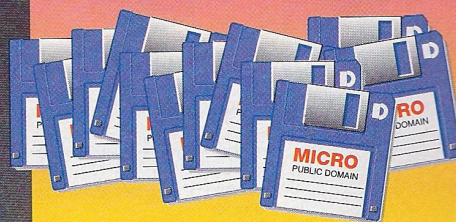


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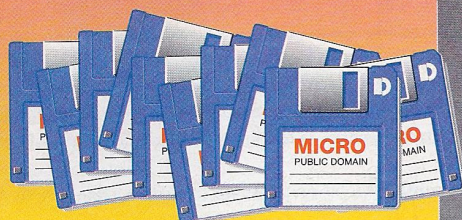


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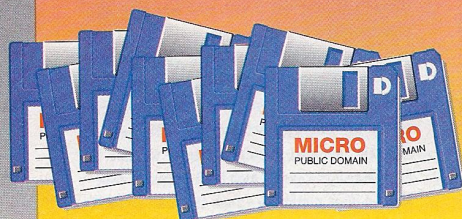
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Clubbin'

Programming is tough. Harry Sideras takes a look at the ICTARI programmers user group, to see if it ever gets any easier.

In common with most of the user groups I've visited the running of ICTARI is in the hands of someone other than the originator. When Nick Bates stepped down a few years ago to concentrate on his university work, it was Peter Hibbs who agreed to take the helm.

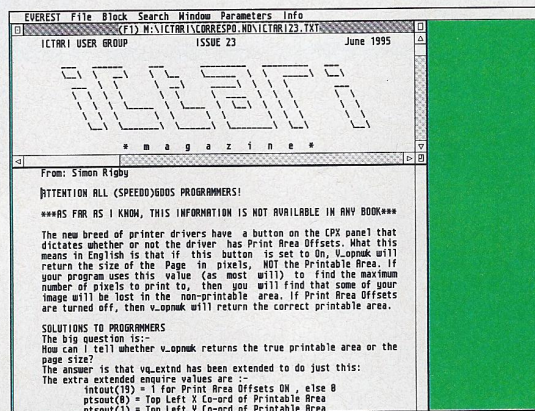
ICTARI originated as an email-based user group on a university BBS and developed into a postal group in order to attract a wider membership, which it did by doubling up as a public domain library. Now that Peter is heading up the group it's now concerned solely with programming issues. While this did initially reduce the membership the group has nearly doubled in size over the last year.

Run as a non-profit making organisation, ICTARI provides a forum for Atari programmers to discuss existing techniques, solve programming problems, examine the new protocols being developed and explore new areas that the collective talent among the members can develop.

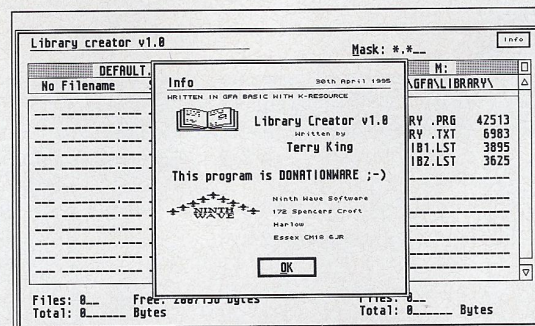
Point of contact

All that's required for membership is a double-sided disk and two postage stamps, which will get you the current disk magazine and a short questionnaire for you to complete. From then on, around the middle of the month, a disk is sent to each member containing an updated members list and feedback on the previous month's disk. The main highlight though is the code provided.

Members are welcome at every level from beginner to experienced programmer. The emphasis is very much on clearing up existing areas of difficulty for individual members, both by the inclusion of regular tutorials and by feedback that comes in when disks are returned for copying. Contributions of original code are positively encouraged and are included in preference to



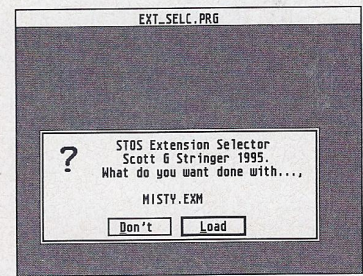
Code-heads revisited?



Another member's library creator for use with both GFA and Assembler.

information pulled out of the public domain that may already be readily available. As Peter says, there's nothing programmers like more than to have their work used and nothing so demoralising as having no feedback.

The majority of members use either C or Assembler and the content reflects this, but not to the exclusion of the other development platforms. Code is often also provided in GFA Basic and the disk features sections dedicated to STOS, GFA and the occasional Pascal. In addition there is always a miscellaneous section which discusses file



A utility to select STOS extensions, but written in Assembler!

formats, the newer protocols, conversion tables, user interfaces, accessing of hardware and other general issues that aren't so dependent on the language being used.

New developments

To get a feel for the diversity of subjects raised each month, I can do no better than list some of the contents of the June issue, which was current at the time of writing.

For programmers in assembler there are routines related to Overscan, STe 8-way hardware scrolling and the Blitter chip. In C, part 12 of 18 tutorials on GEM as well as replacement standard library functions. In GFA BASIC a hi-res format program and a library creator, while in STOS there's code for a menu shell, screen saver and STOS extension selector.

The highlight of the disk though is Peter's own detailed draft specification for a universal printer driver (UPD) which allows programmers to write a program which requires a printed output (text or graphics) without having to write their own printer code. I'll be interested in his eventual results.

The most important aspect of a programmers' user group is the advice and feedback and ICTARI provides this aplenty. If you're getting stuck with your code or you've found a wrinkle worth sharing there may be no better place to send it.

Making contact

To join ICTARI send an SAE to the address below. You'll be sent an information sheet and a questionnaire which should be returned with a blank disk and two stamps. The next issue will be sent out on the 15th of the month.

ICTARI 63 Woolsbridge Road, Ringwood, Hampshire BH24 2LX

Feedback

Feedback is always welcome, either at the magazine address or via email to sidclery@cix.compulink.co.uk. Online, you can join the NeST support echo N.SUP.ATARI_WORLD at any NeST BBS or on CIX join the atari.world conference.

FALCON OWNERS GROUP

"THE FALCON OWNERS GROUP has been around for as long as the Falcon030 and is responsible for producing the electronic publication 'FALCON UPDATE', as well as stocking a healthy public domain library and offering help and support where possible, both on-line and off.

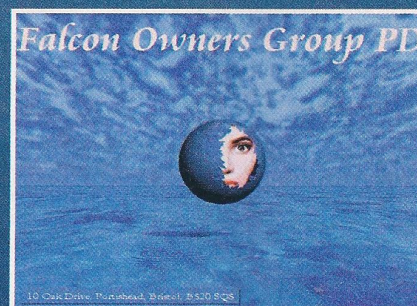
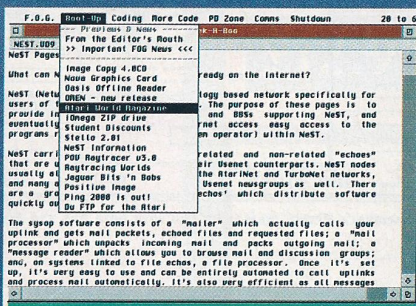
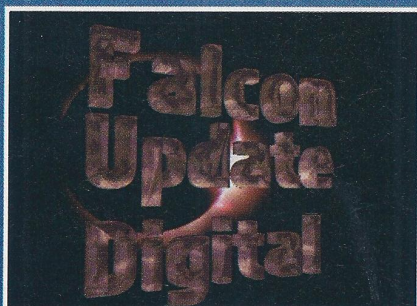
For the last two years FOG has been somewhat in-active while the rest of the Atari community has left ahead. This is about to change with the brand new re-launch of the Falcon Owners Group. We have made some large changes inside the club and are now geared back towards serving any Falcon owner, anywhere."



FOG (UK)
10 OAK DRIVE
PORTISHEAD
BRISTOL
BS20 8QS

E-Mail Address:
sfog@cbbs.centron.com

"We are still publishing our electronic magazine FALCON UPDATE and issue 9 out this month. Readers contributions are most welcome and we will print almost anything we get sent. We are also offering a well stocked PD LIBRARY, packed with 100% Falcon applications from the latest demos to games and utilities. Our prices are lower than you might expect. We also have our own section on 42BBS where you can download plenty of software while catching up with the latest news and messages. Call now on 01256 895106. Or if that proves too busy you can always check out Chameleon BBS on 01454 881095. So why not cut out the coupon below and send it to us with a blank disk for more information and plenty of free software. You'll be surprised at the change."



"The Falcon FacTT File
 and 42 BBS wish FOG
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 their re-launch."

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Q&A

You send in the questions – Ofir Gal and his team of experts set about solving 'em...

Digital



Q I got a Digital hard drive model DSP3107L, PE44298 708, at an auction. I am trying to connect it to my Protar 120HD. It connect to the spare cable but there is another connection on drive which requires a cable but do not how or where or what it is called. Can you help me. Sola Ogundimu

A You don't really give me much to go on, such as size and number of pins. However, hard disks need two cables connected, one for the power and one for the data transfer to the host adaptor circuit board.

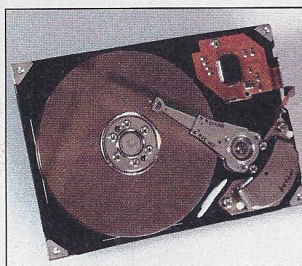
The DC power cable is standard throughout the industry where the connector consists of four large round pins surrounded by a white plastic 'D' shaped 'box'. There should be a red, yellow and two black wires. The red carries +5 Volts DC, the yellow +12 VDC and the black wires are Ground.

If your Protar 120HD only has one of these available in the box and assuming that you intend to connect up both drives, then you need to get a 'Y' splitter cable which splits this into two power cables.

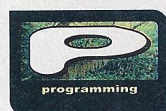
The data transfer cable is usually a flat cable consisting of 50 wires and ending in a socket consisting of two rows of 25 pins. This is a standard SCSI cable. If you only have one cable you need to split this into two by connecting another socket along its length. The socket you need is a double row IDC socket consisting of two rows of 25 holes. You crimp this onto the flat cable making sure

that pin 1 (usually coloured red on the cable) is in the right place with respect to any 'key' on the hard disk connector and cable socket. Also make sure that the drive connected to this socket has its terminator resistors removed. These are usually a long row of small pins connected at the top along the length. The hard disk at the end of the chain must keep its terminators.

Mark S Baines



Dissertation



Q I am a final year degree student who programs mainly in C and with a reasonable knowledge of machine code. After reading the article in issue 1 about the Falcon's DSP chip, I am considering doing my dissertation on this subject.

Do you have any suggestions on where to find any detailed information on this processor?

Also, I have recently downloaded some source code for the DSP and the file has an MSA extension. OK, so maybe I'm a bit thick, but in all the years I have owned an ST and then a Falcon I have never heard of this file format. Any clues?

Many thanks.

Gary Ingram via Internet

Send us your questions

Can't find anyone to answer that nagging question? Then drop us a line. Our team of experts are on hand to investigate and solve almost anything you can throw at them. Just send your letters to:

Atari World Q&A, Specialist Magazines Ltd, Unit 3 Green Farm, Abbots Ripton, Huntingdon, Cambridge PE17 2PF

or e-mail them to:

atari_world@cix.compulink.co.uk

While every effort will be made to answer your question within the pages of either Atari World or Atari Pro, please note that individual correspondence cannot be entered into.

A Obtaining programming information on the Falcon's DSP chip (the Motorola 56001) is not too hard. Motorola themselves publish the definitive documentation for the chip. Order the "DSP56000/DSP56001 User's Manual" Revision 2 (reference code DSP56000UM/AD) from Motorola Ltd, European Literature Centre, 88 Tanners Drive, Blakelands, Milton Keynes, MK14 5BP.

Earlier this year, it cost £11.84 including UK postage. Send a cheque with your order, and the book should be with you fairly rapidly. Be warned though, the manual is hard-core technical information, and makes few concessions to the beginner.

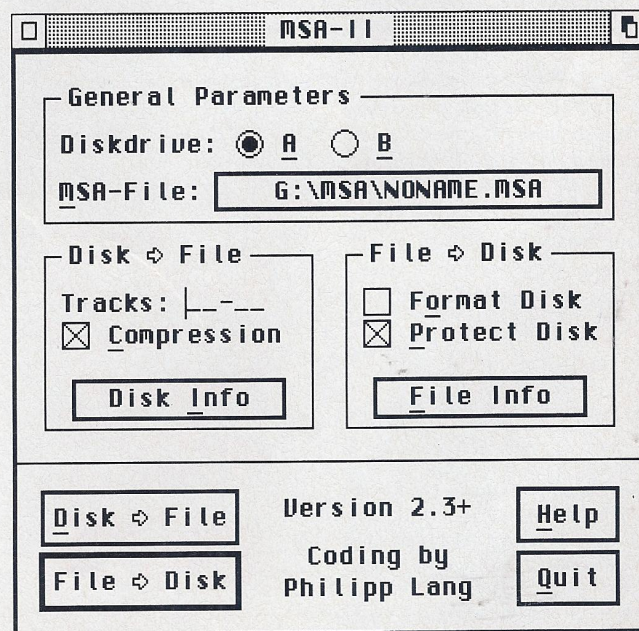
Also, the Motorola documentation only covers the operation and instruction set of the chip itself. No mention is made of the Atari machines whatsoever. To program the chip successfully, you will need to know about the environment in which the Falcon's

DSP operates and the TOS calls that support it. For this aspect of the system, try The Atari Compendium (HiSoft) or even better, the Atari DocSupport package for the Falcon (this is available to non-registered developers).

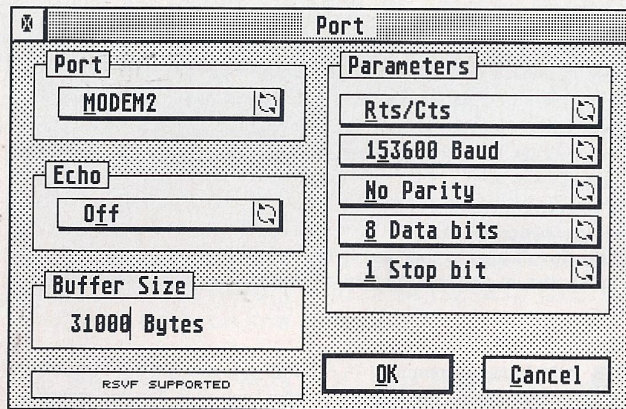
Some example code will help greatly too in figuring out how to get started. To unpack files with an MSA extension, you will need a copy of the Magic Shadow Archiver. This is available from most good PD libraries and BBS – disk UT503 from the ST Club (0115 9455250) should have what you want. The latest version of the program that I have seen is v2.3.

The MSA format is usually used to compress the contents of an entire floppy, including boot sector, into one file; so you may need to extract the archive onto a floppy and then copy off the files you want. Good luck with your dissertation!

Jon Ellis



The Magic Shadow Archiver is useful for making floppy disk images. Its main use is in the comms world allowing users to transfer an identical copy of a floppy disk.



LAN time no see



Q The Falcon has a socket on the back labelled

'LAN', but I have seen no references in the magazines to any hardware or software which supports it. What sort of LAN (Local Area Network) is it, what else do I need to use it, and can it talk to other makes of computer, eg 386's? It would be useful to be able to exchange files at a faster rate than possible using file transfer via the serial ports.

Alan Price

The Falcon modem port is capable of speeds up to 153Kbaud if used with HSModem. The LAN port is a little slower at 115Kb

Funny faces



Q I've noticed that in some of your screenshots

that a different font is used on the screen. I don't mean in program windows but in dialogue boxes and menus. Can you tell me how your reviewers do this as I can't find an option to change fonts on my desktop.

Rod Hardcastle, Yorks

A The LAN port on the Falcon is supported by comms programs such as Connect when used with the serial driver HSModem. This enables you to transfer data using Zmodem or a similar protocol at speeds of up to 153Kbaud on the modem port and 115Kb on the LAN port.

If you have two Falcons, or a Falcon and a MegaSTe, you could network them using the shareware program Duet or the forthcoming MIDICom. Networking with a PC is possible using the shareware program Ghostlink. There is no software available for networking with a Mac unless the Mac is running MagiCMac.

Ofir Gal

A This is a case of our writers being a bit naughty (and I'm one of the worst offenders). We're not meant to use a different screen font for screenshots in case it causes confusion. To answer your question, there are a number of programs in the public domain that let you change your screen font but the one that's used most often is the commercial screen accelerator, NVDI.

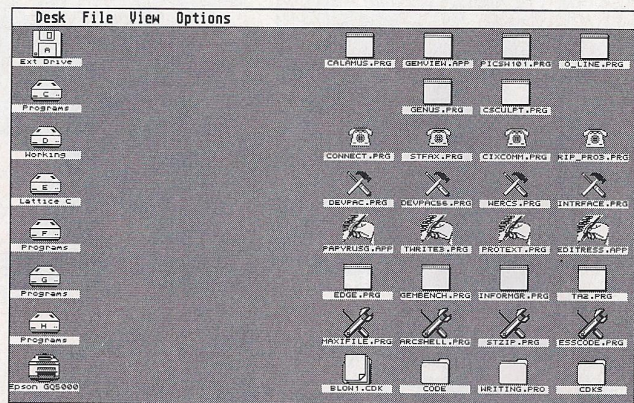
Graeme Rutt

Q&A

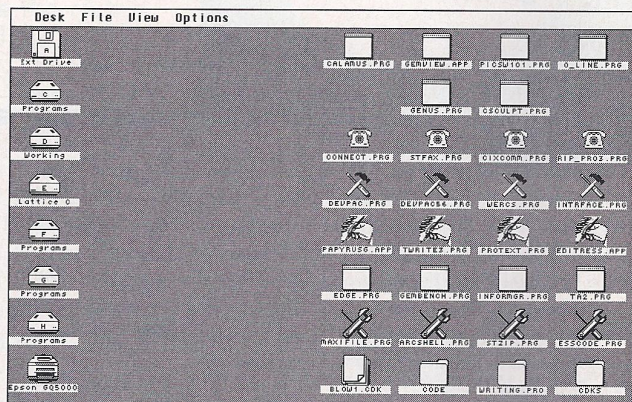
Fancy earning a tenner?

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Send us your hint on a disk, saved as a text file (preferably), along with a screenshot for illustration, or possibly a drawing if it's a "you can build this" style tip. We'll pay £10 for every reader hint that we publish.



The desktop in unadulterated glory...



... and now with NVDI's glorious Monaco screen font. (Yuk - Ed)

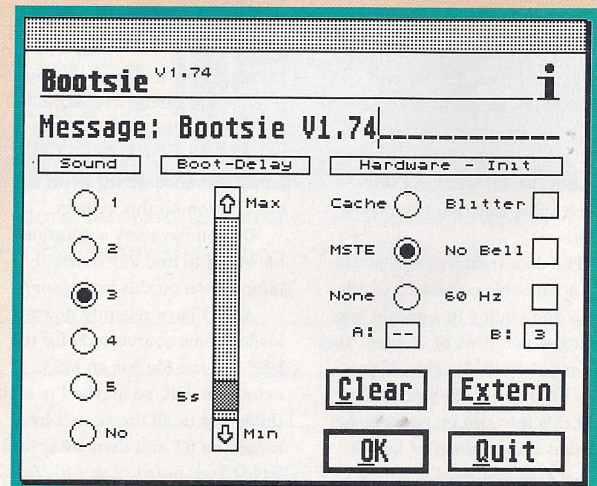
Delay no more...



TIP If you have upgraded your ST's TOS to TOS 2.06, then you will have noticed the longer delay in booting up the computer. This is because TOS 2.06 waits to detect a hard drive. Even hard drive users find the delay to be a bit long at times!

The solution is to reduce this delay, which can be done by using a PD program called Bootsie. You can specify the boot delay in number of seconds. Bootsie writes code to the bootsector of a floppy disk, with which you boot up.

Paul Edmondson, Leeds



Reduce the boot delay and more with Bootsie.

On the squeeze

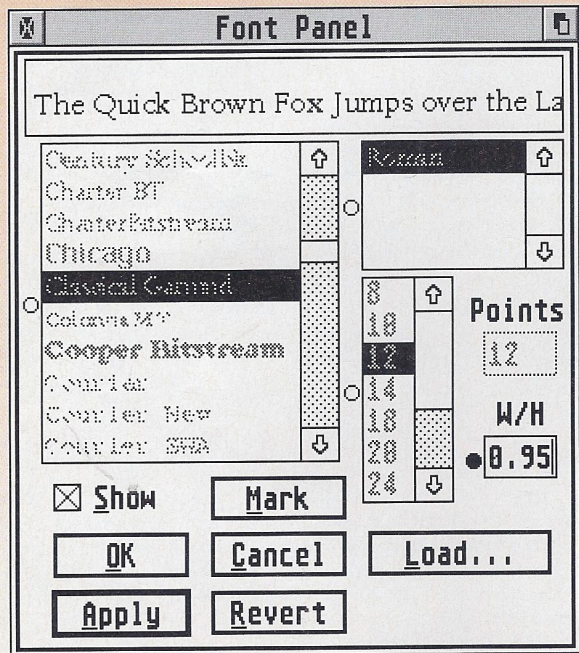
TIP Sometimes, when writing a letter, you end up with a line or two too many to squeeze into a single page. It is much neater to contain the whole letter in a single page and it seems the only way around this is to use a smaller font.

If you are using Papyrus you have several options to choose from. First, the Paragraph Offsets dialogue box can be used to adjust paragraph spacing. If this doesn't help, you can use the font panel to reduce font width. The W/H box normally contains the number "1", indicating that Papyrus is using a standard width and height ratio. Press Control+A to select all text in your document, then disable all fields by clicking on the small black dots, but leave the W/H field enabled. Try entering 0.95 instead.

This will make all text slightly narrower, normally enough to move the overflowing lines into the first page. If that doesn't work, try 0.9 or smaller values.

Note that there's a bug in Speedo V5 preventing this trick from working with TrueType fonts.

Herb Johnson, Liverpool



The font panel in Papyrus, a powerful tool that puts most DTP programs to shame.



Q I've used Fast BASIC for years to

create a large number of programmes such as a database of all my books. If I change platforms or languages how do I get at all that data without typing it all in again?

Andrew McDermott, Stirling

A Fast BASIC stores its own listings in a tokenised form but if you drag a listing file from the Fast BASIC desktop to the clipboard it is saved in ASCII format as CLIPFILE.ASC. You should be able to enter it into another BASIC compiler or interpreter.

Your own data files should be in ASCII format or if not, can you write another Fast BASIC program to convert them into something readable? Then why not use a

proper database program, such as Superbase Pro?

Most database programs can import an ASCII file of data after you have designed the structure of the database file, that is, decided what fields you want (Title, Author etc.) and what type they should be (text, date, numeric etc.). Such files normally have one complete record on a single line with commas separating the fields. They are called Comma-Separated-Values or CSV files.

An example might be: Pratchett, Terry, Colour of Magic Corgi, 1983, 0 552 12475 3, 238 for a database with the following fields in this order:

Author Surname
Author Forename
Title
Publisher
Date
ISBN
Pages.

Mark S Baines

Basic



Q For some years now I've used my STe for

the odd bit of word processing, some limited database work and to play games on. Recently I've decided that I'd like to know more about my computer and to that end I'd like to know how to program it. I'm not sure about how to start, or which language to use. Can you give me some advice? I have a medium resolution screen, a 20 megabyte hard disk and 2 megabytes of memory. Tom Potts, Blackburn.

A When you begin to program you have three main languages to choose from; assembler, C or BASIC. The first is harder to learn, produces extremely fast code and gives you complete freedom to do anything your computer can. The latter is the easier to learn, produces

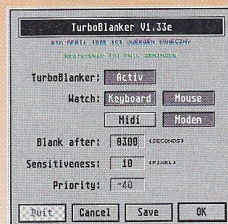
slower code and has some limits on what it can do. C, the middle choice, is a halfway house between the two.

If you're new to programming then I'd advise that you take a look at BASIC. It will give you a thorough grounding in the principles of programming, whilst not being too much of a shock to the system. The master of programming languages on the Atari is, without a doubt, HiSoft. It has produced versions of all the popular languages that all work around a common interface. The HiSoft languages also produce extremely good (compact and fast) code and generally make the programmer's life much easier.

HiSoft BASIC is currently at version 2.10 and costs £79.95, if you don't require the extended version for the Falcon you can buy version 2.02 for a more affordable £59.95.

For information on how to program, check out Jon Ellis' series in *Atari World*.

Graeme Rutt



Free performance increase

TIP If you're a Falcon owner into raytracing, fractals, programming etc you can get a free performance increase anywhere between 16% and 48% (GemBench figures) using TurboBlanker, the Falcon only screensaver.

TurboBlanker tells the Falcon to forget about updating the screen and concentrate on your application, which is ideal during lengthy processes which don't require

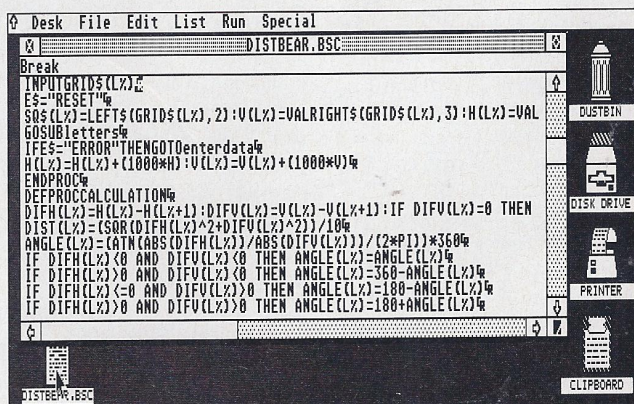
Turbo charged. A screen saver that can speed up your Falcon.

interaction - and before you ask, turning the monitor off doesn't achieve the same result!

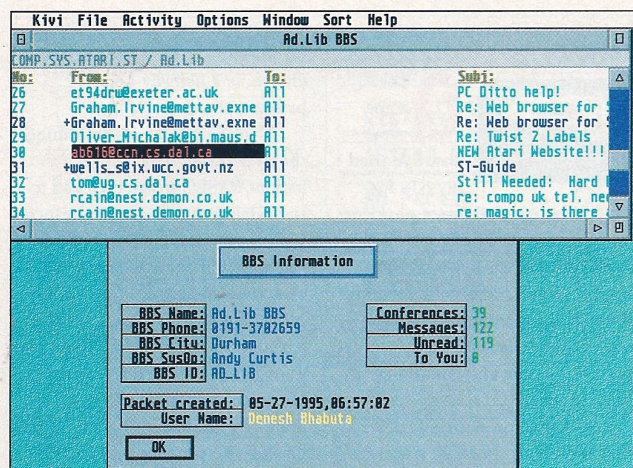
Similar performance improvement is built into the hardware screen enhancer BlowUp (not ScreenBlaster) but this isn't very flexible and simulates the VBL interrupt which some programs object to.

TurboBlanker runs as a desktop accessory or application and takes advantage of the energy saving mode offered by modern monitors. TurboBlanker can monitor mouse, keyboard and modem activity with 'hot' zones to immediately turn saver mode on/off. Compatibility with monitors isn't 100% but since it's shareware you can try before you buy.

Jennie Fitzgerald, Newcastle



To save the file in ASCII, drag the program file to the Clipboard then drag the clipboard to the Disk icon.



Browsing through Usenet messages off-line using Kivi.

Online blues



Once I graduate (hopefully) I intend to buy a new TOS machine, and get some online access as I'll lose the University system access. At present I'm considering a 4Mb Mega STe with Hard Drive. Which software, and which service (CIX, Compuserve etc) would you recommend?

Dom Mooney via Internet

The service you go for depends on your budget and what you require from the access. In my opinion Compuserve isn't very good for Atari users. This leaves you with three choices: an Internet provider like Demon Internet Services, Compulink Information Exchange (CIX), or your local Bulletin Board System (BBS).

With Demon your ST will be an actual site on the internet, allowing you to download software (ftp) directly to your ST from any other ftp site on the internet. For £10 a month, Demon also gives you Usenet news, e-mail, and the facility to use a graphical web browser if your computer supports it.

AtariNOS is the freeware software for Demon for downloading mail and messages to be read and replied to off-line. AtariNOS is known for its unfriendliness, and Oasis (reviewed in PD Arena recently) fills that gap.

CIX is basically a BBS which gives you facilities such as e-mail, Usenet, ftp and WWW access via a text based browser. Currently CIX

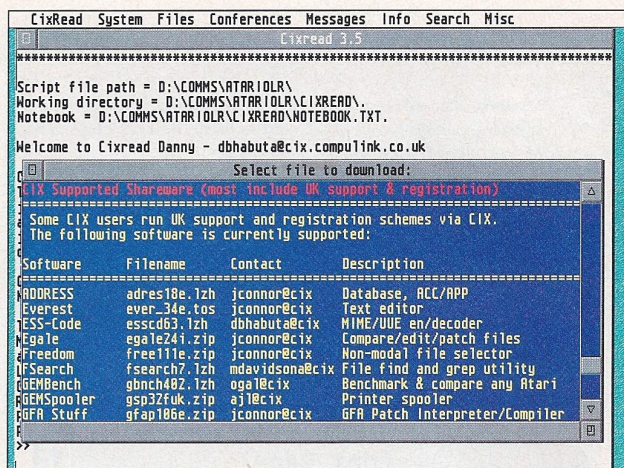
only lets you use internet services instead of directly connecting you to the internet. But CIX is still very good as there are many Atari specific message areas, with an enthusiastic bunch of Atarians accessing it everyday. CIX charges 4p off peak and 6p during peak hours per minute. Using the excellent suite of shareware programs CIXCOMM/CIXREAD, you can download mail and messages to read and reply off-line. My monthly cix bill comes to around £10 a month!

As for the BBS find one that gives you access to the Atari network NeST. Most BBSs are free but some ask for a yearly payment of around #10 for extra features such as e-mail. It's not bad if you consider what services you receive... e-mail, usenet, NeST, AtariNet and Fidonet messages. There are bound to be lots of files for downloading, so you may have no need for ftp.

BBSs worth considering are AD-Lib, The Tavern, 42BBS and The Fortress. You will need a terminal program such as CoNnect to dial into them and any of the many off-line readers such as Kivi or ReJoinDer.

Finally, I'd like to mention that accessing any Atari network is good. If you can't access the Internet, you will not be disappointed by the BBS networks. I hope you did well in your exams.

Denesh Bhabuta



Cixcomm even allows you to download files from CIX's own file areas.

Note: True, Compuserve isn't very good for Atari chat or up-to-date file access but it is excellent for weather maps, hot-off-the-press satellite pictures, news and general interest with some great forums to visit. Many US Atari vendors

are online and as a source of images, clip art and fonts for DTP it is excellent. It also offers the best user support with most of the world's hardware and software vendors being well represented.

Andrew Wright

Timeworks 2

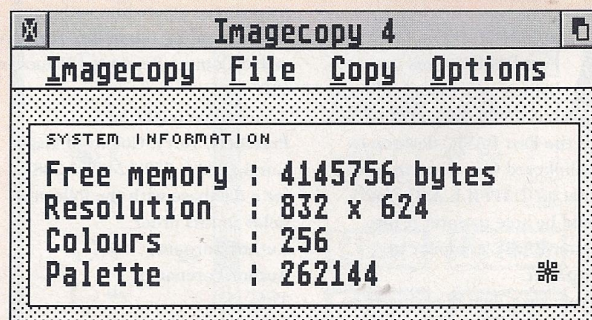


I'm pleased to see this program once again given away on a cover disk. I bought an upgrade to version 2 after the original was given away at Christmas on an ST Review disk, and it has done a great deal of work over the last couple of years.

One thing Timeworks isn't good at is printing scans of photographs but you can make a reasonable job of this using the following method.

- Get your scans done and saved in TIF true colour.
- Place your text in frames and lay out your document using empty frames for your pictures.
- When you are happy with the layout, go to the size and position dialogue box with the picture frame selected, and note the exact size of the box.
- Save your work and exit Timeworks.
- Load Imagecopy - if you have not got it, shame on you - and select your printer type. From the same menu select output to IMG file.
- Next select the print dithering you require. I have a Deskjet and find the 45 degree halftone and 16 by 16 [4 by 4] setting a good compromise.
- Select your image to be printed. You will then see the print dialogue measurements that you noted down previously.
- Now print to disk and load the resulting file into your Timeworks document. You can now print and get the best possible result. Note also that you should try to maintain the aspect ratio of the original scan or the result will appear stretched in one direction.

Chris Miles via CIX



Scanned images in Timeworks work best if you let Imagecopy process them first...

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Essex RM6 6QW
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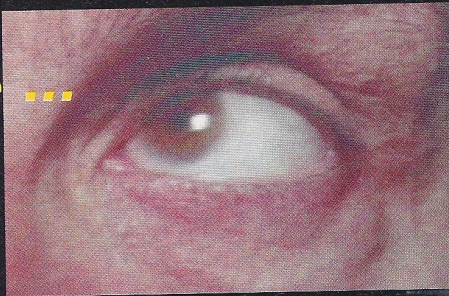
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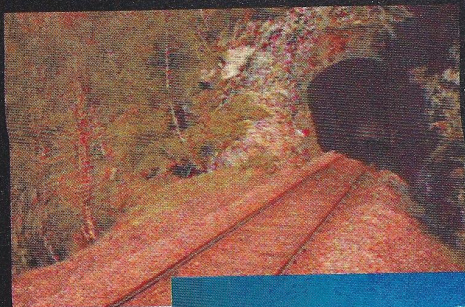
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Watch this space ...



exposé

falcon video digitiser



Falcon specific, high-spec video digitiser for capturing live video directly from camcorder or VCR. Supplied with separate RGB Splitter for complete image control.

Supplied with APEX Media art & animation software, Exposé can capture high quality still images up to 24-bit resolution or 16-bit animations can be compiled up to 25 fps.



FalCAM

Picture-in-Picture (PiP) Desk accessory to provide live video images from within any GEM program.

FalCAM Tripod

Advanced true colour digitising support for the creation of high-resolution grabs with control for exposure time and resolution. Exports to JPEG, GIF, TGA & PPM with adjustable dithering and smoothing for JPEG creation. Includes on-screen live video image.

Videobox

Demonstration program which texture maps live video directly onto the faces of a cube, which can be spun and zoomed in real-time.

Tech Spec

- On-board memory - 512KB Static-RAM
- Frame Capture - 40ms (25fps)
- Interface - Falcon bus

RGB Splitter

- Inputs - Composite or S-Video
- Input signal type - PAL or NTSC
- Output - RGB
- Controls - Brightness, contrast, colour, sync and NTSC hue

Resolutions

- Rostrum - Max. 768x576, 24-bit
- Animation (16-bit) - 512x320 @ 6fps
- 256x160 @ 17fps
- 128x80 @ 25fps

Prices

- Exposé (for existing APEX users) - £249
- Exposé with APEX Media - £369



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FUTURE**

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Squirrels do it with Zip!



A brand-new SCSI peripheral, the Zip™ may well revolutionise the storage industry.

This newest, most portable exchangeable hard disk drive weighs in at just 1lb, has fast transfer and access times (up to 1Mb/s transfer, 28ms seek), easily fits in your hand, your bag or your briefcase, stores up to 100Mb on floppy-sized disks, is perfect for all types of application and is priced at a level that will make you want to unzip your wallet immediately!

These drives and associated cartridges (25Mb & 100Mb) will be available in late August '95 directly from HiSoft with especially-written driver and support software included. Trust HiSoft to bring you the latest innovations at the best possible prices!

Order your Zip drive now to be first in the long queue!

£179

Price inc 1 cartridge, extra 100Mb cartridges £15.95 or less!



Atari Zip Tools exclusively from HiSoft

Zip drives from HiSoft come with everything you need to get going on a SCSI-aware Atari: the Zip 100 drive, a 100Mb cartridge, all necessary leads and a complete set of software, programmed by HiSoft, including:

- Easy-to-use CPX
- Temporary unprotect
- Password protect
- Cartridge initialisation
- Write protection
- Cartridge eject

Super-Value CD-ROM Pack

HiSoft has done it again with a brilliant multimedia pack of the ICD Link 2 SCSI interface, the Aiwa ACD-300 CD-ROM and the Extensos Pro software!

Just look at what you get:

- The solid, dependable ICD Link 2 SCSI interface which allows up to 7 peripherals (hard drive, CD-ROM, Zip, scanner etc.) to be daisy-chained together.
- Extensos Pro driver software which fully supports the Aiwa drive and also provides an audio player for controlling and playing music CDs from your computer.
- The great-looking Aiwa ACD-300 CD-ROM drive; a fast, double-speed CD-ROM with full SCSI specification plus complete audio controls on the front so that you can play music CDs directly. Plus an informative LCD panel.

All this, packaged together, at a truly superb price, with full 1 year warranty and technical support from HiSoft.

only £250

value if purchased separately £275



- Order the Aiwa ACD-300 on its own for just £175.
- Extensos Pro is available separately at £29.95.
- The ICD Link 2 SCSI interface costs £69.95 when purchased by itself.



The Best-Value Hard Drives

and CD-ROMs

Keep your Atari up-to-date with our brand-new Squirrel SCSI hard drives, available in a range of capacities for all Atari computers.

Based on only the highest quality mechanisms from top suppliers, with full manufacturer's warranty, our hard drives are fully tested for all Atari computers (preferably TOS 1.04 and above) and come with our own additional warranty and technical support. ST Format was so impressed that it awarded our drives the coveted ST Format Gold.

Squirrel SCSI drives will daisy-chain to your existing SCSI interface (ask for cable);

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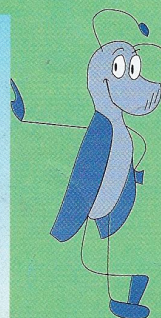
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There's More!

Here's a list of popular HiSoft titles for the Atari computers (prices shown are individual RRP's): ICD Link 2 - £69.95, Squirrel Storage Systems - call, Replay16 16 bit sound sampler - £99.95, Stereomaster 8 bit sampler - £39.95, Clarity Falcon - £99.95, VideoMaster (from £69.95), HiSoft Desktop 3.10 - £79.95, HiSoft BASIC 2 - £99.95, Lattice C 5.6 - £99.95, DevpacDSP - £99.95, Diamond Edge 2 - £49.95, Diamond Edge 3 - £49.95, Twist 2 database - £89.95, Papyrus Gold - £129, Harlekin 3 - £49.95, Chemist - £39.95, TruePaint/TrueImage - £49.95, The Atari Compendium - £39.95 and more.

Coming very soon: Twist 3 and more!

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